

Pro Gln Arg Gly Gly Gly Ser Ser Lys Leu Phe Ser Ser Ser Phe Asn
 100 105 110

Gly Gly Arg Arg Asp Glu Val Ala Glu Ala Gln Arg Ala Glu Phe Ser
 115 120 125

Pro Ala Gln Phe Ser Gly Pro Lys Lys Ile Asn Leu Asn His Leu Leu
 130 135 140

Asn Phe Thr Phe Glu Pro Arg Gly Gln Thr Gly His Phe Glu Gly Ser
 145 150 155 160

Gly His Gly Ser Trp Gly Lys Arg Asn Lys Trp Gly His Lys Pro Phe
 165 170 175

Asn Lys Glu Leu Phe Leu Gln Ala Asn Cys Gln Phe Val Val Ser Glu
 180 185 190

Asp Gln Asp Tyr Thr Ala His Phe Ala Asp Pro Asp Thr Leu Val Asn
 195 200 205

Trp Asp Phe Val Glu Gln Val Arg Ile Cys Ser His Glu Val Pro Ser
 210 215 220

Cys Pro Ile Cys Leu Tyr Pro Pro Thr Ala Ala Lys Ile Thr Arg Cys
 225 230 235 240

Gly His Ile Phe Cys Trp Ala Cys Ile Leu His Tyr Leu Ser Leu Ser
 245 250 255

Glu Lys Thr Trp Ser Lys Cys Pro Ile Cys Tyr Ser Ser Val His Lys
 260 265 270

Lys Asp Leu Lys Ser Val Val Ala Thr Glu Ser His Gln Tyr Val Val
 275 280 285

Gly Asp Thr Ile Thr Met Gln Leu Met Lys Arg Glu Lys Gly Val Leu
 290 295 300

Val Ala Leu Pro Lys Ser Lys Trp Met Asn Val Asp His Pro Ile His
 305 310 315 320

Leu Gly Asp Glu Gln His Ser Gln Tyr Ser Lys Phe Leu Leu Ala Ser
 325 330 335

Lys Glu Gln Val Leu His Arg Val Val Leu Glu Glu Lys Val Ala Leu
 340 345 350

Glu Gln Gln Leu Ala Glu Glu Lys His Thr Pro Glu Ser Cys Phe Ile
 355 360 365

Glu Ala Ala Ile Gln Glu Leu Lys Thr Arg Glu Glu Ala Leu Ser Gly
 370 375 380

Leu Ala Gly Ser Arg Arg Glu Val Thr Gly Val Val Ala Ala Leu Glu
 385 390 395 400

Gln Leu Val Leu Met Ala Pro Leu Ala Lys Glu Ser Val Phe Gln Pro
 405 410 415

Arg Lys Gly Val Leu Glu Tyr Leu Ser Ala Phe Asp Glu Glu Thr Thr
 420 425 430

Glu Val Cys Ser Leu Asp Thr Pro Ser Arg Pro Leu Ala Leu Pro Leu
 435 440 445

Val Glu Glu Glu Glu Ala Val Ser Glu Pro Glu Pro Glu Gly Leu Pro
 450 455 460

Glu Ala Cys Asp Asp Leu Glu Leu Ala Asp Asp Asn Leu Lys Glu Gly
 465 470 475 480

Thr Ile Cys Thr Glu Ser Ser Gln Gln Glu Pro Ile Thr Lys Ser Gly
 485 490 495

Phe Thr Arg Leu Ser Ser Ser Pro Cys Tyr Tyr Phe Tyr Gln Ala Glu
 500 505 510

Asp Gly Gln His Met Phe Leu His Pro Val Asn Val Arg Cys Leu Val
 515 520 525

Arg Glu Tyr Gly Ser Leu Glu Arg Ser Pro Glu Lys Ile Ser Ala Thr
 530 535 540

Val Val Glu Ile Ala Gly Tyr Ser Met Ser Glu Asp Val Arg Gln Arg
 545 550 555 560

His Arg Tyr Leu Ser His Leu Pro Leu Thr Cys Glu Phe Ser Ile Cys
 565 570 575

Glu Leu Ala Leu Gln Pro Pro Val Val Ser Lys Glu Thr Leu Glu Met

580

585

590

Phe Ser Asp Asp Ile Glu Lys Arg Lys Arg Gln Arg Gln Lys Lys Ala
595 600 605

Arg Glu Glu Arg Arg Arg Glu Arg Arg Ile Glu Ile Glu Glu Asn Lys
610 615 620

Lys Gln Gly Lys Tyr Pro Glu Val His Ile Pro Leu Glu Asn Leu Gln
625 630 635 640

Gln Phe Pro Ala Phe Asn Ser Tyr Thr Cys Ser Ser Asp Ser Ala Leu
645 650 655

Gly Pro Thr Ser Thr Glu Gly His Gly Ala Leu Ser Ile Ser Pro Leu
660 665 670

Ser Arg Ser Pro Gly Ser His Ala Asp Phe Leu Leu Thr Pro Leu Ser
675 680 685

Pro Thr Ala Ser Gln Gly Ser Pro Ser Phe Cys Val Gly Ser Leu Glu
690 695 700

Glu Asp Ser Pro Phe Pro Ser Phe Ala Gln Met Leu Arg Val Gly Lys
705 710 715 720

Ala Lys Ala Asp Val Trp Pro Lys Thr Ala Pro Lys Lys Asp Glu Asn
725 730 735

Ser Leu Val Pro Pro Ala Pro Val Asp Ser Asp Gly Glu Ser Asp Asn
740 745 750

Ser Asp Arg Val Pro Val Pro Ser Phe Gln Asn Ser Phe Ser Gln Ala
755 760 765

Ile Glu Ala Ala Phe Met Lys Leu Asp Thr Pro Ala Thr Ser Asp Pro
770 775 780

Leu Ser Glu Glu Lys Gly Gly Lys Lys Arg Lys Lys Gln Lys Gln Lys
785 790 795 800

Leu Leu Phe Ser Thr Ser Val Val His Thr Lys
805 810

<210> 2585

<211> 482

<212> PRT
 <213> Homo sapiens

<400> 2585

Met Ala Glu Ala Ala Thr Pro Gly Thr Thr Ala Thr Thr Ser Gly Ala
 1 5 10 15

Gly Ala Ala Ala Ala Thr Ala Ala Ala Ala Ser Pro Thr Pro Ile Pro
 20 25 30

Thr Val Thr Ala Pro Ser Leu Gly Ala Gly Gly Gly Gly Gly Gly Ser
 35 40 45

Asp Gly Ser Gly Gly Gly Trp Thr Lys Gln Val Thr Cys Arg Tyr Phe
 50 55 60

Met His Gly Val Cys Lys Glu Gly Asp Asn Cys Arg Tyr Ser His Asp
 65 70 75 80

Leu Ser Asp Ser Pro Tyr Ser Val Val Cys Lys Tyr Phe Gln Arg Gly
 85 90 95

Tyr Cys Ile Tyr Gly Asp Arg Cys Arg Tyr Glu His Ser Lys Pro Leu
 100 105 110

Lys Gln Glu Glu Ala Thr Ala Thr Glu Leu Thr Thr Lys Ser Ser Leu
 115 120 125

Ala Ala Ser Ser Ser Leu Ser Ser Ile Val Gly Pro Leu Val Glu Met
 130 135 140

Asn Thr Gly Glu Ala Glu Ser Arg Asn Ser Asn Phe Ala Thr Val Gly
 145 150 155 160

Ala Gly Ser Glu Asp Trp Val Asn Ala Ile Glu Phe Val Pro Gly Gln
 165 170 175

Pro Tyr Cys Gly Arg Thr Ala Pro Ser Cys Thr Glu Ala Pro Leu Gln
 180 185 190

Gly Ser Val Thr Lys Glu Glu Ser Glu Lys Glu Gln Thr Ala Val Glu
 195 200 205

Thr Lys Lys Gln Leu Cys Pro Tyr Ala Ala Val Gly Glu Cys Arg Tyr
 210 215 220

Gly Glu Asn Cys Val Tyr Leu His Gly Asp Ser Cys Asp Met Cys Gly
 225 230 235 240

Leu Gln Leu Leu His Pro Met Asp Ala Ala Gln Arg Ser Gln His Ile
 245 250 255

Lys Ser Cys Ile Glu Ala His Glu Lys Asp Met Glu Leu Ser Phe Ala
 260 265 270

Val Gln Arg Ser Lys Asp Met Val Cys Gly Ile Cys Met Glu Val Val
 275 280 285

Tyr Glu Lys Ala Asn Pro Ser Glu Arg Arg Phe Gly Ile Leu Ser Asn
 290 295 300

Cys Asn His Thr Tyr Cys Leu Lys Cys Ile Arg Lys Trp Arg Ser Ala
 305 310 315 320

Lys Gln Phe Glu Ser Lys Ile Ile Lys Ser Cys Pro Glu Cys Arg Ile
 325 330 335

Thr Ser Asn Phe Val Ile Pro Ser Glu Tyr Trp Val Glu Glu Lys Glu
 340 345 350

Glu Lys Gln Lys Leu Ile Leu Lys Tyr Lys Glu Ala Met Ser Asn Lys
 355 360 365

Ala Cys Arg Tyr Phe Asp Glu Gly Arg Gly Ser Cys Pro Phe Gly Gly
 370 375 380

Asn Cys Phe Tyr Lys His Ala Tyr Pro Asp Gly Arg Arg Glu Glu Pro
 385 390 395 400

Gln Arg Gln Lys Val Gly Thr Ser Ser Arg Tyr Arg Ala Gln Arg Arg
 405 410 415

Asn His Phe Trp Glu Leu Ile Glu Glu Arg Glu Asn Ser Asn Pro Phe
 420 425 430

Asp Asn Asp Glu Glu Glu Val Val Thr Phe Glu Leu Gly Glu Met Leu
 435 440 445

Leu Met Leu Leu Ala Ala Gly Gly Asp Asp Glu Leu Thr Asp Ser Glu
 450 455 460

Asp Glu Trp Asp Leu Phe His Asp Glu Leu Glu Asp Phe Tyr Asp Leu

465

470

475

480

Asp Leu

<210> 2586
 <211> 146
 <212> PRT
 <213> Homo sapiens
 <400> 2586

Met Pro Ser Lys Gly Pro Leu Gln Ser Val Gln Val Phe Gly Arg Lys
 1 5 10 15

Lys Thr Ala Thr Ala Val Ala His Cys Lys Arg Gly Asn Gly Leu Ile
 20 25 30

Lys Val Asn Gly Arg Pro Leu Glu Met Ile Glu Pro Arg Thr Leu Gln
 35 40 45

Tyr Lys Leu Leu Glu Pro Val Leu Leu Leu Gly Lys Glu Arg Phe Ala
 50 55 60

Gly Val Asp Ile Arg Val Arg Val Lys Gly Gly Gly His Val Ala Gln
 65 70 75 80

Ile Tyr Ala Ile Arg Gln Ser Ile Ser Lys Ala Leu Val Ala Tyr Tyr
 85 90 95

Gln Lys Tyr Val Asp Glu Ala Ser Lys Lys Glu Ile Lys Asp Ile Leu
 100 105 110

Ile Gln Tyr Asp Arg Thr Leu Leu Val Ala Asp Pro Arg Arg Cys Glu
 115 120 125

Ser Lys Lys Phe Gly Gly Pro Gly Ala Arg Ala Arg Tyr Gln Lys Ser
 130 135 140

Tyr Arg
 145

<210> 2587
 <211> 1674
 <212> PRT
 <213> Homo sapiens
 <400> 2587

Met Glu Asp Ala Ser Glu Ser Ser Arg Gly Val Ala Pro Leu Ile Asn
 1 5 10 15

Asn Val Val Leu Pro Gly Ser Pro Leu Ser Leu Pro Val Ser Val Thr
 20 25 30

Gly Cys Lys Ser His Arg Val Ala Asn Lys Lys Val Glu Ala Arg Ser
 35 40 45

Glu Lys Leu Leu Pro Thr Ala Leu Pro Pro Ser Glu Pro Lys Val Asp
 50 55 60

Gln Lys Leu Pro Arg Ser Ser Glu Arg Arg Gly Ser Gly Gly Gly Thr
 65 70 75 80

Gln Phe Pro Ala Arg Ser Arg Ala Val Ala Ala Gly Glu Ala Ala Ala
 85 90 95

Arg Gly Ala Ala Gly Pro Glu Arg Gly Ser Pro Leu Gly Arg Arg Val
 100 105 110

Ser Pro Arg Cys Leu Cys Ser Gly Glu Gly Gly Gln Val Ala Val Gly
 115 120 125

Val Ile Ala Gly Lys Arg Gly Arg Arg Gly Arg Asp Gly Ser Arg Arg
 130 135 140

Ala Pro Gly Gly Arg Glu Met Pro Leu Leu His Arg Lys Pro Phe Val
 145 150 155 160

Arg Gln Lys Pro Pro Ala Asp Leu Arg Pro Asp Glu Glu Val Phe Tyr
 165 170 175

Cys Lys Val Thr Asn Glu Ile Phe Arg His Tyr Asp Asp Phe Phe Glu
 180 185 190

Arg Thr Ile Leu Cys Asn Ser Leu Val Trp Ser Cys Ala Val Thr Gly
 195 200 205

Arg Pro Gly Leu Thr Tyr Gln Glu Ala Leu Glu Ser Glu Lys Lys Ala
 210 215 220

Arg Gln Asn Leu Gln Ser Phe Pro Glu Pro Leu Ile Ile Pro Val Leu
 225 230 235 240

Tyr Leu Thr Ser Leu Thr His Arg Ser Arg Leu His Glu Ile Cys Asp

245										250					255				
Asp	Ile	Phe	Ala	Tyr	Val	Lys	Asp	Arg	Tyr	Phe	Val	Glu	Glu	Thr	Val				
			260						265					270					
Glu	Val	Ile	Arg	Asn	Asn	Gly	Ala	Arg	Leu	Gln	Cys	Thr	Ile	Leu	Glu				
		275					280					285							
Val	Leu	Pro	Pro	Ser	His	Gln	Asn	Gly	Phe	Ala	Asn	Gly	His	Val	Asn				
	290						295					300							
Ser	Val	Asp	Gly	Glu	Thr	Ile	Ile	Ile	Ser	Asp	Ser	Asp	Asp	Ser	Glu				
305					310					315					320				
Thr	Gln	Ser	Cys	Ser	Phe	Gln	Asn	Gly	Lys	Lys	Lys	Asp	Ala	Ile	Asp				
				325					330						335				
Pro	Leu	Leu	Phe	Lys	Tyr	Lys	Val	Gln	Pro	Thr	Lys	Lys	Glu	Leu	His				
			340					345						350					
Glu	Ser	Ala	Ile	Val	Lys	Ala	Thr	Gln	Ile	Ser	Arg	Arg	Lys	His	Leu				
		355					360					365							
Phe	Ser	Arg	Asp	Lys	Leu	Lys	Leu	Phe	Leu	Lys	Gln	His	Cys	Glu	Pro				
	370					375					380								
Gln	Glu	Gly	Val	Ile	Lys	Ile	Lys	Ala	Ser	Ser	Leu	Ser	Thr	Tyr	Lys				
385					390					395					400				
Ile	Ala	Glu	Gln	Asp	Phe	Ser	Tyr	Phe	Phe	Pro	Asp	Asp	Pro	Pro	Thr				
				405					410						415				
Phe	Ile	Phe	Ser	Pro	Ala	Asn	Arg	Arg	Arg	Gly	Arg	Pro	Pro	Lys	Arg				
			420					425					430						
Ile	His	Ile	Ser	Gln	Glu	Asp	Asn	Val	Ala	Asn	Lys	Gln	Thr	Leu	Ala				
		435					440					445							
Ser	Tyr	Arg	Ser	Lys	Ala	Thr	Lys	Glu	Arg	Asp	Lys	Leu	Leu	Lys	Gln				
	450					455					460								
Glu	Glu	Met	Lys	Ser	Leu	Ala	Phe	Glu	Lys	Ala	Lys	Leu	Lys	Arg	Glu				
465					470					475					480				
Lys	Ala	Asp	Ala	Leu	Glu	Ala	Lys	Lys	Lys	Glu	Lys	Glu	Asp	Lys	Glu				
				485					490					495					

Lys Lys Arg Glu Glu Leu Lys Lys Ile Val Glu Glu Glu Arg Leu Lys
 500 505 510

Lys Lys Glu Glu Lys Glu Arg Leu Lys Val Glu Arg Glu Lys Glu Arg
 515 520 525

Glu Lys Leu Arg Glu Glu Lys Arg Lys Tyr Val Glu Tyr Leu Lys Gln
 530 535 540

Trp Ser Lys Pro Arg Glu Asp Met Glu Cys Asp Asp Leu Lys Glu Leu
 545 550 555 560

Pro Glu Pro Thr Pro Val Lys Thr Arg Leu Pro Pro Glu Ile Phe Gly
 565 570 575

Asp Ala Leu Met Val Leu Glu Phe Leu Asn Ala Phe Gly Glu Leu Phe
 580 585 590

Asp Leu Gln Asp Glu Phe Pro Asp Gly Val Thr Leu Glu Val Leu Glu
 595 600 605

Glu Ala Leu Val Gly Asn Asp Ser Glu Gly Pro Leu Cys Glu Leu Leu
 610 615 620

Phe Phe Phe Leu Thr Ala Ile Phe Gln Ala Ile Ala Glu Glu Glu Glu
 625 630 635 640

Glu Val Ala Lys Glu Gln Leu Thr Asp Ala Asp Thr Lys Gly Cys Ser
 645 650 655

Leu Lys Ser Leu Asp Leu Asp Ser Cys Thr Leu Ser Glu Ile Leu Arg
 660 665 670

Leu His Ile Leu Ala Ser Gly Ala Asp Val Thr Ser Ala Asn Ala Lys
 675 680 685

Tyr Arg Tyr Gln Lys Arg Gly Gly Phe Asp Ala Thr Asp Asp Ala Cys
 690 695 700

Met Glu Leu Arg Leu Ser Asn Pro Ser Leu Val Lys Lys Leu Ser Ser
 705 710 715 720

Thr Ser Val Tyr Asp Leu Thr Pro Gly Glu Lys Met Lys Ile Leu His
 725 730 735

Ala Leu Cys Gly Lys Leu Leu Thr Leu Val Ser Thr Arg Asp Phe Ile
 740 745 750

Glu Asp Tyr Val Asp Ile Leu Arg Gln Ala Lys Gln Glu Phe Arg Glu
 755 760 765

Leu Lys Ala Glu Gln His Arg Lys Glu Arg Glu Glu Ala Ala Ala Arg
 770 775 780

Ile Arg Lys Arg Lys Glu Glu Lys Leu Lys Glu Gln Glu Gln Lys Met
 785 790 795 800

Lys Glu Lys Gln Glu Lys Leu Lys Glu Asp Glu Gln Arg Asn Ser Thr
 805 810 815

Ala Asp Ile Ser Ile Gly Glu Glu Glu Arg Glu Asp Phe Asp Thr Ser
 820 825 830

Ile Glu Ser Lys Asp Thr Glu Gln Lys Glu Leu Asp Gln Asp Met Phe
 835 840 845

Thr Glu Asp Glu Asp Asp Pro Gly Ser His Lys Arg Gly Arg Arg Gly
 850 855 860

Lys Arg Gly Gln Asn Gly Phe Lys Glu Phe Thr Arg Gln Glu Gln Ile
 865 870 875 880

Asn Cys Val Thr Arg Glu Leu Leu Thr Ala Asp Glu Glu Glu Ala Leu
 885 890 895

Lys Gln Glu His Gln Arg Lys Glu Lys Glu Leu Leu Glu Lys Ile Gln
 900 905 910

Ser Ala Ile Ala Cys Thr Asn Ile Phe Pro Leu Gly Arg Asp Arg Met
 915 920 925

Tyr Arg Arg Tyr Trp Ile Phe Pro Ser Ile Pro Gly Leu Phe Ile Glu
 930 935 940

Glu Asp Tyr Ser Gly Leu Thr Glu Asp Met Leu Leu Pro Arg Pro Ser
 945 950 955 960

Ser Phe Gln Asn Asn Val Gln Ser Gln Asp Pro Gln Val Ser Thr Lys
 965 970 975

Thr Gly Glu Pro Leu Met Ser Glu Ser Thr Ser Asn Ile Asp Gln Gly
 980 985 990

Pro Arg Asp His Ser Val Gln Leu Pro Lys Pro Val His Lys Pro Asn
 995 1000 1005

Arg Trp Cys Phe Tyr Ser Ser Cys Glu Gln Leu Asp Gln Leu Ile
 1010 1015 1020

Glu Ala Leu Asn Ser Arg Gly His Arg Glu Ser Ala Leu Lys Glu
 1025 1030 1035

Thr Leu Leu Gln Glu Lys Ser Arg Ile Cys Ala Gln Leu Ala Arg
 1040 1045 1050

Phe Ser Glu Glu Lys Phe His Phe Ser Asp Lys Pro Gln Pro Asp
 1055 1060 1065

Ser Lys Pro Thr Tyr Ser Arg Gly Arg Ser Ser Asn Ala Tyr Asp
 1070 1075 1080

Pro Ser Gln Met Cys Ala Glu Lys Gln Leu Glu Leu Arg Leu Arg
 1085 1090 1095

Asp Phe Leu Leu Asp Ile Glu Asp Arg Ile Tyr Gln Gly Thr Leu
 1100 1105 1110

Gly Ala Ile Lys Val Thr Asp Arg His Ile Trp Arg Ser Ala Leu
 1115 1120 1125

Glu Ser Gly Arg Tyr Glu Leu Leu Ser Glu Glu Asn Lys Glu Asn
 1130 1135 1140

Gly Ile Ile Lys Thr Val Asn Glu Asp Val Glu Glu Met Glu Ile
 1145 1150 1155

Asp Glu Gln Thr Lys Val Ile Val Lys Asp Arg Leu Leu Gly Ile
 1160 1165 1170

Lys Thr Glu Thr Pro Ser Thr Val Ser Thr Asn Ala Ser Thr Pro
 1175 1180 1185

Gln Ser Val Ser Ser Val Val His Tyr Leu Ala Met Ala Leu Phe
 1190 1195 1200

Gln Ile Glu Gln Gly Ile Glu Arg Arg Phe Leu Lys Ala Pro Leu

1205		1210		1215
Asp Ala Ser Asp Ser Gly Arg Ser Tyr Lys Thr Val Leu Asp Arg				
1220		1225		1230
Trp Arg Glu Ser Leu Leu Ser Ser Ala Ser Leu Ser Gln Val Phe				
1235		1240		1245
Leu His Leu Ser Thr Leu Asp Arg Ser Val Ile Trp Ser Lys Ser				
1250		1255		1260
Ile Leu Asn Ala Arg Cys Lys Ile Cys Arg Lys Lys Gly Asp Ala				
1265		1270		1275
Glu Asn Met Val Leu Cys Asp Gly Cys Asp Arg Gly His His Thr				
1280		1285		1290
Tyr Cys Val Arg Pro Lys Leu Lys Thr Val Pro Glu Gly Asp Trp				
1295		1300		1305
Phe Cys Pro Glu Cys Arg Pro Lys Gln Arg Cys Arg Arg Leu Ser				
1310		1315		1320
Phe Arg Gln Arg Pro Ser Leu Glu Ser Asp Glu Asp Val Glu Asp				
1325		1330		1335
Ser Met Gly Gly Glu Asp Asp Glu Val Asp Gly Asp Glu Glu Glu				
1340		1345		1350
Gly Gln Ser Glu Glu Glu Glu Tyr Glu Val Glu Gln Asp Glu Asp				
1355		1360		1365
Asp Ser Gln Glu Glu Glu Glu Val Ser Leu Pro Lys Arg Gly Arg				
1370		1375		1380
Pro Gln Val Arg Leu Pro Val Lys Thr Arg Gly Lys Leu Ser Ser				
1385		1390		1395
Ser Phe Ser Ser Arg Gly Gln Gln Gln Glu Pro Gly Arg Tyr Pro				
1400		1405		1410
Ser Arg Ser Gln Gln Ser Thr Pro Lys Thr Thr Val Ser Ser Lys				
1415		1420		1425
Thr Gly Arg Ser Leu Arg Lys Ile Asn Ser Ala Pro Pro Thr Glu				
1430		1435		1440

Thr Lys Ser Leu Arg Ile Ala Ser Arg Ser Thr Arg His Ser His
 1445 1450 1455
 Gly Pro Leu Gln Ala Asp Val Phe Val Glu Leu Leu Ser Pro Arg
 1460 1465 1470
 Arg Lys Arg Arg Gly Arg Lys Ser Ala Asn Asn Thr Pro Glu Asn
 1475 1480 1485
 Ser Pro Asn Phe Pro Asn Phe Arg Val Ile Ala Thr Lys Ser Ser
 1490 1495 1500
 Glu Gln Ser Arg Ser Val Asn Ile Ala Ser Lys Leu Ser Leu Gln
 1505 1510 1515
 Glu Ser Glu Ser Lys Arg Arg Cys Arg Lys Arg Gln Ser Pro Glu
 1520 1525 1530
 Pro Ser Pro Val Thr Leu Gly Arg Arg Ser Ser Gly Arg Gln Gly
 1535 1540 1545
 Gly Val His Glu Leu Ser Ala Phe Glu Gln Leu Val Val Glu Leu
 1550 1555 1560
 Val Arg His Asp Asp Ser Trp Pro Phe Leu Lys Leu Val Ser Lys
 1565 1570 1575
 Ile Gln Val Pro Asp Tyr Tyr Asp Ile Ile Lys Lys Pro Ile Ala
 1580 1585 1590
 Leu Asn Ile Ile Arg Glu Lys Val Asn Lys Cys Glu Tyr Lys Leu
 1595 1600 1605
 Ala Ser Glu Phe Ile Asp Asp Ile Glu Leu Met Phe Ser Asn Cys
 1610 1615 1620
 Phe Glu Tyr Asn Pro Arg Asn Thr Ser Glu Ala Lys Ala Gly Thr
 1625 1630 1635
 Arg Leu Gln Ala Phe Phe His Ile Gln Ala Gln Lys Leu Gly Leu
 1640 1645 1650
 His Val Thr Pro Ser Asn Val Asp Gln Val Ser Thr Pro Pro Ala
 1655 1660 1665

Ala Lys Lys Ser Arg Ile
1670

<210> 2588
<211> 103
<212> PRT
<213> Homo sapiens

<400> 2588

Met Ala Gln Phe Val Arg Asn Leu Val Glu Lys Thr Pro Ala Leu Val
1 5 10 15

Asn Ala Ala Val Thr Tyr Ser Lys Pro Arg Leu Ala Thr Phe Trp Tyr
20 25 30

Tyr Ala Lys Val Glu Leu Val Pro Pro Thr Pro Ala Glu Ile Pro Arg
35 40 45

Ala Ile Gln Ser Leu Lys Lys Ile Ala Asn Ser Ala Gln Thr Gly Ser
50 55 60

Phe Lys Gln Leu Thr Val Lys Glu Ala Val Leu Asn Gly Leu Val Ala
65 70 75 80

Thr Glu Val Leu Met Trp Phe Tyr Val Gly Glu Ile Ile Gly Lys Arg
85 90 95

Gly Ile Ile Gly Tyr Asp Val
100

<210> 2589
<211> 156
<212> PRT
<213> Homo sapiens

<400> 2589

Met Ser Gly Gly Leu Leu Lys Ala Leu Arg Ser Asp Ser Tyr Val Glu
1 5 10 15

Leu Ser Gln Tyr Arg Asp Gln His Phe Arg Gly Asp Asn Glu Glu Gln
20 25 30

Glu Lys Leu Leu Lys Lys Ser Cys Thr Leu Tyr Val Gly Asn Leu Ser
35 40 45

Phe Tyr Thr Thr Glu Glu Gln Ile Tyr Glu Leu Phe Ser Lys Ser Gly
50 55 60

Asp Ile Lys Lys Ile Ile Met Gly Leu Asp Lys Met Lys Lys Thr Ala
65 70 75 80

Cys Gly Phe Cys Phe Val Glu Tyr Tyr Ser Arg Ala Asp Ala Glu Asn
85 90 95

Ala Met Arg Tyr Ile Asn Gly Thr Arg Leu Asp Asp Arg Ile Ile Arg
100 105 110

Thr Asp Trp Asp Ala Gly Phe Lys Glu Gly Arg Gln Tyr Gly Arg Gly
115 120 125

Arg Ser Gly Gly Gln Val Arg Asp Glu Tyr Arg Gln Asp Tyr Asp Ala
130 135 140

Gly Arg Gly Gly Tyr Gly Lys Leu Ala Gln Asn Gln
145 150 155

<210> 2590
<211> 436
<212> PRT
<213> Homo sapiens

<400> 2590

Met Asp Ser Val Ala Phe Glu Asp Val Ala Val Asn Phe Thr Gln Glu
1 5 10 15

Glu Trp Ala Leu Leu Ser Pro Ser Gln Lys Asn Leu Tyr Arg Asp Val
20 25 30

Thr Leu Glu Thr Phe Arg Asn Leu Ala Ser Val Gly Ile Gln Trp Lys
35 40 45

Asp Gln Asp Ile Glu Asn Leu Tyr Gln Asn Leu Gly Ile Lys Leu Arg
50 55 60

Ser Leu Val Glu Arg Leu Cys Gly Arg Lys Glu Gly Asn Glu His Arg
65 70 75 80

Glu Thr Phe Ser Gln Ile Pro Asp Cys His Leu Asn Lys Lys Ser Gln
85 90 95

Thr Gly Val Lys Pro Cys Lys Cys Ser Val Cys Gly Lys Val Phe Leu
100 105 110

Arg His Ser Phe Leu Asp Arg His Met Arg Ala His Ala Gly His Lys
 115 120 125

Arg Ser Glu Cys Gly Gly Glu Trp Arg Glu Thr Pro Arg Lys Gln Lys
 130 135 140

Gln His Gly Lys Ala Ser Ile Ser Pro Ser Ser Gly Ala Arg Arg Thr
 145 150 155 160

Val Thr Pro Thr Arg Lys Arg Pro Tyr Glu Cys Lys Val Cys Gly Lys
 165 170 175

Ala Phe Asn Ser Pro Asn Leu Phe Gln Ile His Gln Arg Thr His Thr
 180 185 190

Gly Lys Arg Ser Tyr Lys Cys Arg Glu Ile Val Arg Ala Phe Thr Val
 195 200 205

Ser Ser Phe Phe Arg Lys His Gly Lys Met His Thr Gly Glu Lys Arg
 210 215 220

Tyr Glu Cys Lys Tyr Cys Gly Lys Pro Ile Asp Tyr Pro Ser Leu Phe
 225 230 235 240

Gln Ile His Val Arg Thr His Thr Gly Glu Lys Pro Tyr Lys Cys Lys
 245 250 255

Gln Cys Gly Lys Ala Phe Ile Ser Ala Gly Tyr Leu Arg Thr His Glu
 260 265 270

Ile Arg Ser His Ala Leu Glu Lys Ser His Gln Cys Gln Glu Cys Gly
 275 280 285

Lys Lys Leu Ser Cys Ser Ser Ser Leu His Arg His Glu Arg Thr His
 290 295 300

Ser Gly Gly Lys Leu Tyr Glu Cys Gln Lys Cys Ala Lys Val Phe Arg
 305 310 315 320

Cys Pro Thr Ser Leu Gln Ala His Glu Arg Ala His Thr Gly Glu Arg
 325 330 335

Pro Tyr Glu Cys Asn Lys Cys Gly Lys Thr Phe Asn Tyr Pro Ser Cys
 340 345 350

Phe Arg Arg His Lys Lys Thr His Ser Gly Glu Lys Pro Tyr Glu Cys

355

360

365

Thr Arg Cys Gly Lys Ala Phe Gly Trp Cys Ser Ser Leu Arg Arg His
 370 375 380

Glu Met Thr His Thr Gly Glu Lys Pro Phe Asp Cys Lys Gln Cys Gly
 385 390 395 400

Lys Val Phe Thr Phe Ser Asn Tyr Leu Arg Leu His Glu Arg Thr His
 405 410 415

Leu Ala Gly Arg Ser Gln Cys Phe Gly Arg Arg Gln Gly Asp His Leu
 420 425 430

Ser Pro Gly Val
 435

<210> 2591
 <211> 92
 <212> PRT
 <213> Homo `sapiens

<400> 2591

Met Gln Val Ser Thr Ala Ala Leu Ala Val Leu Leu Cys Thr Met Ala
 1 5 10 15

Leu Cys Asn Gln Phe Ser Ala Ser Leu Ala Ala Asp Thr Pro Thr Ala
 20 25 30

Cys Cys Phe Ser Tyr Thr Ser Arg Gln Ile Pro Gln Asn Phe Ile Ala
 35 40 45

Asp Tyr Phe Glu Thr Ser Ser Gln Cys Ser Lys Pro Gly Val Ile Phe
 50 55 60

Leu Thr Lys Arg Ser Arg Gln Val Cys Ala Asp Pro Ser Glu Glu Trp
 65 70 75 80

Val Gln Lys Tyr Val Ser Asp Leu Glu Leu Ser Ala
 85 90

<210> 2592
 <211> 271
 <212> PRT
 <213> Homo sapiens

<400> 2592

Met Glu Ala Leu Pro Leu Leu Ala Ala Thr Thr Pro Asp His Gly Arg
1 5 10 15

His Arg Arg Leu Leu Leu Leu Pro Leu Leu Leu Phe Leu Leu Pro Ala
20 25 30

Gly Ala Val Gln Gly Trp Glu Thr Glu Glu Arg Pro Arg Thr Arg Glu
35 40 45

Glu Glu Cys His Phe Tyr Ala Gly Gly Gln Val Tyr Pro Gly Glu Ala
50 55 60

Ser Arg Val Ser Val Ala Asp His Ser Leu His Leu Ser Lys Ala Lys
65 70 75 80

Ile Ser Lys Pro Ala Pro Tyr Trp Glu Gly Thr Ala Val Ile Asp Gly
85 90 95

Glu Phe Lys Glu Leu Lys Leu Thr Asp Tyr Arg Gly Lys Tyr Leu Val
100 105 110

Phe Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu Ile
115 120 125

Ile Ala Phe Gly Asp Arg Leu Glu Glu Phe Arg Ser Ile Asn Thr Glu
130 135 140

Val Val Ala Cys Ser Val Asp Ser Gln Phe Thr His Leu Ala Trp Ile
145 150 155 160

Asn Thr Pro Arg Arg Gln Gly Gly Leu Gly Pro Ile Arg Ile Pro Leu
165 170 175

Leu Ser Asp Leu Thr His Gln Ile Ser Lys Asp Tyr Gly Val Tyr Leu
180 185 190

Glu Asp Ser Gly His Thr Leu Arg Gly Leu Phe Ile Ile Asp Asp Lys
195 200 205

Gly Ile Leu Arg Gln Ile Thr Leu Asn Asp Leu Pro Val Gly Arg Ser
210 215 220

Val Asp Glu Thr Leu Arg Leu Val Gln Ala Phe Gln Tyr Thr Asp Lys
225 230 235 240

His Gly Glu Val Cys Pro Ala Gly Trp Lys Pro Gly Ser Glu Thr Ile

245

250

255

Ile Pro Asp Pro Ala Gly Lys Leu Lys Tyr Phe Asp Lys Leu Asn
 260 265 270,

<210> 2593

<211> 659

<212> PRT

<213> Homo sapiens

<400> 2593

Met Ala Ala Val Ile Leu Glu Ser Ile Phe Leu Lys Arg Ser Gln Gln
 1 5 10 15

Lys Lys Lys Thr Ser Pro Leu Asn Phe Lys Lys Arg Leu Phe Leu Leu
 20 25 30

Thr Val His Lys Leu Ser Tyr Tyr Glu Tyr Asp Phe Glu Arg Gly Arg
 35 40 45

Arg Gly Ser Lys Lys Gly Ser Ile Asp Val Glu Lys Ile Thr Cys Val
 50 55 60

Glu Thr Val Val Pro Glu Lys Asn Pro Pro Pro Glu Arg Gln Ile Pro
 65 70 75 80

Arg Arg Gly Glu Glu Ser Ser Glu Met Glu Gln Ile Ser Ile Ile Glu
 85 90 95

Arg Phe Pro Tyr Pro Phe Gln Val Val Tyr Asp Glu Gly Pro Leu Tyr
 100 105 110

Val Phe Ser Pro Thr Glu Glu Leu Arg Lys Arg Trp Ile His Gln Leu
 115 120 125

Lys Asn Val Ile Arg Tyr Asn Ser Asp Leu Val Gln Lys Tyr His Pro
 130 135 140

Cys Phe Trp Ile Asp Gly Gln Tyr Leu Cys Cys Ser Gln Thr Ala Lys
 145 150 155 160

Asn Ala Met Gly Cys Gln Ile Leu Glu Asn Arg Asn Gly Ser Leu Lys
 165 170 175

Pro Gly Ser Ser His Arg Lys Thr Lys Lys Pro Leu Pro Pro Thr Pro
 180 185 190

Glu Glu Asp Gln Ile Leu Lys Lys Pro Leu Pro Pro Glu Pro Ala Ala
 195 200 205

Ala Pro Val Ser Thr Ser Glu Leu Lys Lys Val Val Ala Leu Tyr Asp
 210 215 220

Tyr Met Pro Met Asn Ala Asn Asp Leu Gln Leu Arg Lys Gly Asp Glu
 225 230 235 240

Tyr Phe Ile Leu Glu Glu Ser Asn Leu Pro Trp Trp Arg Ala Arg Asp
 245 250 255

Lys Asn Gly Gln Glu Gly Tyr Ile Pro Ser Asn Tyr Val Thr Glu Ala
 260 265 270

Glu Asp Ser Ile Glu Met Tyr Glu Trp Tyr Ser Lys His Met Thr Arg
 275 280 285

Ser Gln Ala Glu Gln Leu Leu Lys Gln Glu Gly Lys Glu Gly Gly Phe
 290 295 300

Ile Val Arg Asp Ser Ser Lys Ala Gly Lys Tyr Thr Val Ser Val Phe
 305 310 315 320

Ala Lys Ser Thr Gly Asp Pro Gln Gly Val Ile Arg His Tyr Val Val
 325 330 335

Cys Ser Thr Pro Gln Ser Gln Tyr Tyr Leu Ala Glu Lys His Leu Phe
 340 345 350

Ser Thr Ile Pro Glu Leu Ile Asn Tyr His Gln His Asn Ser Ala Gly
 355 360 365

Leu Ile Ser Arg Leu Lys Tyr Pro Val Ser Gln Gln Asn Lys Asn Ala
 370 375 380

Pro Ser Thr Ala Gly Leu Gly Tyr Gly Ser Trp Glu Ile Asp Pro Lys
 385 390 395 400

Asp Leu Thr Phe Leu Lys Glu Leu Gly Thr Gly Gln Phe Gly Val Val
 405 410 415

Lys Tyr Gly Lys Trp Arg Gly Gln Tyr Asp Val Ala Ile Lys Met Ile
 420 425 430

Lys Glu Gly Ser Met Ser Glu Asp Glu Phe Ile Glu Glu Ala Lys Val
435 440 445

Met Met Asn Leu Ser His Glu Lys Leu Val Gln Leu Tyr Gly Val Cys
450 455 460

Thr Lys Gln Arg Pro Ile Phe Ile Ile Thr Glu Tyr Met Ala Asn Gly
465 470 475 480

Cys Leu Leu Asn Tyr Leu Arg Glu Met Arg His Arg Phe Gln Thr Gln
485 490 495

Gln Leu Leu Glu Met Cys Lys Asp Val Cys Glu Ala Met Glu Tyr Leu
500 505 510

Glu Ser Lys Gln Phe Leu His Arg Asp Leu Ala Ala Arg Asn Cys Leu
515 520 525

Val Asn Asp Gln Gly Val Val Lys Val Ser Asp Phe Gly Leu Ser Arg
530 535 540

Tyr Val Leu Asp Asp Glu Tyr Thr Ser Ser Val Gly Ser Lys Phe Pro
545 550 555 560

Val Arg Trp Ser Pro Pro Glu Val Leu Met Tyr Ser Lys Phe Ser Ser
565 570 575

Lys Ser Asp Ile Trp Ala Phe Gly Val Leu Met Trp Glu Ile Tyr Ser
580 585 590

Leu Gly Lys Met Pro Tyr Glu Arg Phe Thr Asn Ser Glu Thr Ala Glu
595 600 605

His Ile Ala Gln Gly Leu Arg Leu Tyr Arg Pro His Leu Ala Ser Glu
610 615 620

Lys Val Tyr Thr Ile Met Tyr Ser Cys Trp His Glu Lys Ala Asp Glu
625 630 635 640

Arg Pro Thr Phe Lys Ile Leu Leu Ser Asn Ile Leu Asp Val Met Asp
645 650 655

Glu Glu Ser

<210> 2594

<211> 417
 <212> PRT
 <213> Homo sapiens

<400> 2594

Met Ser Leu Ser Asn Lys Leu Thr Leu Asp Lys Leu Asp Val Lys Gly
 1 5 10 15

Lys Arg Val Val Met Arg Val Asp Phe Asn Val Pro Met Lys Asn Asn
 20 25 30

Gln Ile Thr Asn Asn Gln Arg Ile Lys Ala Ala Val Pro Ser Ile Lys
 35 40 45

Phe Cys Leu Asp Asn Gly Ala Lys Ser Val Val Leu Met Ser His Leu
 50 55 60

Gly Arg Pro Asp Gly Val Pro Met Pro Asp Lys Tyr Ser Leu Glu Pro
 65 70 75 80

Val Ala Val Glu Leu Lys Ser Leu Leu Gly Lys Asp Val Leu Phe Leu
 85 90 95

Lys Asp Cys Val Gly Pro Glu Val Glu Lys Ala Cys Ala Asn Pro Ala
 100 105 110

Ala Gly Ser Val Ile Leu Leu Glu Asn Leu Arg Phe His Val Glu Glu
 115 120 125

Glu Gly Lys Gly Lys Asp Ala Ser Gly Asn Lys Val Lys Ala Glu Pro
 130 135 140

Ala Lys Ile Glu Ala Phe Arg Ala Ser Leu Ser Lys Leu Gly Asp Val
 145 150 155 160

Tyr Val Asn Asp Ala Phe Gly Thr Ala His Arg Ala His Ser Ser Met
 165 170 175

Val Gly Val Asn Leu Pro Gln Lys Ala Gly Gly Phe Leu Met Lys Lys
 180 185 190

Glu Leu Asn Tyr Phe Ala Lys Ala Leu Glu Ser Pro Glu Arg Pro Phe
 195 200 205

Leu Ala Ile Leu Gly Gly Ala Lys Val Ala Asp Lys Ile Gln Leu Ile
 210 215 220

Asn Asn Met Leu Asp Lys Val Asn Glu Met Ile Ile Gly Gly Gly Met
 225 230 235 240

Ala Phe Thr Phe Leu Lys Val Leu Asn Asn Met Glu Ile Gly Thr Ser
 245 250 255

Leu Phe Asp Glu Glu Gly Ala Lys Ile Val Lys Asp Leu Met Ser Lys
 260 265 270

Ala Glu Lys Asn Gly Val Lys Ile Thr Leu Pro Val Asp Phe Val Thr
 275 280 285

Ala Asp Lys Phe Asp Glu Asn Ala Lys Thr Gly Gln Ala Thr Val Ala
 290 295 300

Ser Gly Ile Pro Ala Gly Trp Met Gly Leu Asp Cys Gly Pro Glu Ser
 305 310 315 320

Ser Lys Lys Tyr Ala Glu Ala Val Thr Arg Ala Lys Gln Ile Val Trp
 325 330 335

Asn Gly Pro Val Gly Val Phe Glu Trp Glu Ala Phe Ala Arg Gly Thr
 340 345 350

Lys Ala Leu Met Asp Glu Val Val Lys Ala Thr Ser Arg Gly Cys Ile
 355 360 365

Thr Ile Ile Gly Gly Gly Asp Thr Ala Thr Cys Cys Ala Lys Trp Asn
 370 375 380

Thr Glu Asp Lys Val Ser His Val Ser Thr Gly Gly Gly Ala Ser Leu
 385 390 395 400

Glu Leu Leu Glu Gly Lys Val Leu Pro Gly Val Asp Ala Leu Ser Asn
 405 410 415

Ile

<210> 2595
 <211> 468
 <212> PRT
 <213> Homo sapiens

<400> 2595

Met Ala Pro Pro Pro Ala Arg Val His Leu Gly Ala Phe Leu Ala Val

Trp Val Ile Leu Val Val Thr Leu Val Val Pro Leu Leu Leu Val Ala
245 250 255

Val Leu Ile Val Cys Cys Cys Ile Gly Ser Gly Cys Gly Gly Asp Pro
 260 265 270

Lys Cys Met Asp Arg Val Cys Phe Trp Arg Leu Gly Leu Leu Arg Gly
 275 280 285

Pro Gly Ala Glu Asp Asn Ala His Asn Glu Ile Leu Ser Asn Ala Asp
 290 295 300

Ser Leu Ser Thr Phe Val Ser Glu Gln Gln Met Glu Ser Gln Glu Pro
 305 310 315 320

Ala Asp Leu Thr Gly Val Thr Val Gln Ser Pro Gly Glu Ala Gln Cys
 325 330 335

Leu Leu Gly Pro Ala Glu Ala Glu Gly Ser Gln Arg Arg Arg Leu Leu
 340 345 350

Val Pro Ala Asn Gly Ala Asp Pro Thr Glu Thr Leu Met Leu Phe Phe
 355 360 365

Asp Lys Phe Ala Asn Ile Val Pro Phe Asp Ser Trp Asp Gln Leu Met
 370 375 380

Arg Gln Leu Asp Leu Thr Lys Asn Glu Ile Asp Val Val Arg Ala Gly
 385 390 395 400

Thr Ala Gly Pro Gly Asp Ala Leu Tyr Ala Met Leu Met Lys Trp Val
 405 410 415

Asn Lys Thr Gly Arg Asn Ala Ser Ile His Thr Leu Leu Asp Ala Leu
 420 425 430

Glu Arg Met Glu Glu Arg His Ala Lys Glu Lys Ile Gln Asp Leu Leu
 435 440 445

Val Asp Ser Gly Lys Phe Ile Tyr Leu Glu Asp Gly Thr Gly Ser Ala
 450 455 460

Val Ser Leu Glu
 465

<210> 2596
 <211> 185
 <212> PRT

<213> Homo sapiens

<400> 2596

Met Lys Leu Val Ser Val Ala Leu Met Tyr Leu Gly Ser Leu Ala Phe
 1 5 10 15

Leu Gly Ala Asp Thr Ala Arg Leu Asp Val Ala Ser Glu Phe Arg Lys
 20 25 30

Lys Trp Asn Lys Trp Ala Leu Ser Arg Gly Lys Arg Glu Leu Arg Met
 35 40 45

Ser Ser Ser Tyr Pro Thr Gly Leu Ala Asp Val Lys Ala Gly Pro Ala
 50 55 60

Gln Thr Leu Ile Arg Pro Gln Asp Met Lys Gly Ala Ser Arg Ser Pro
 65 70 75 80

Glu Asp Ser Ser Pro Asp Ala Ala Arg Ile Arg Val Lys Arg Tyr Arg
 85 90 95

Gln Ser Met Asn Asn Phe Gln Gly Leu Arg Ser Phe Gly Cys Arg Phe
 100 105 110

Gly Thr Cys Thr Val Gln Lys Leu Ala His Gln Ile Tyr Gln Phe Thr
 115 120 125

Asp Lys Asp Lys Asp Asn Val Ala Pro Arg Ser Lys Ile Ser Pro Gln
 130 135 140

Gly Tyr Gly Arg Arg Arg Arg Arg Ser Leu Pro Glu Ala Gly Pro Gly
 145 150 155 160

Arg Thr Leu Val Ser Ser Lys Pro Gln Ala His Gly Ala Pro Ala Pro
 165 170 175

Pro Ser Gly Ser Ala Pro His Phe Leu
 180 185

<210> 2597

<211> 851

<212> PRT

<213> Homo sapiens

<400> 2597

Met Ser Ser Lys Gln Glu Ile Met Ser Asp Gln Arg Phe Arg Arg Val
 1 5 10 15

Ala Lys Asp Pro Arg Phe Trp Glu Met Pro Glu Lys Asp Arg Lys Val
 20 25 30

Lys Ile Asp Lys Arg Phe Arg Ala Met Phe His Asp Lys Lys Phe Lys
 35 40 45

Leu Asn Tyr Ala Val Asp Lys Arg Gly Arg Pro Ile Ser His Ser Thr
 50 55 60

Thr Glu Asp Leu Lys Arg Phe Tyr Asp Leu Ser Asp Ser Asp Ser Asn
 65 70 75 80

Leu Ser Gly Glu Asp Ser Lys Ala Leu Ser Gln Lys Lys Ile Lys Lys
 85 90 95

Lys Lys Thr Gln Thr Lys Lys Glu Ile Asp Ser Lys Asn Leu Val Glu
 100 105 110

Lys Lys Lys Glu Thr Lys Lys Ala Asn His Lys Gly Ser Glu Asn Lys
 115 120 125

Thr Asp Leu Asp Asn Ser Ile Gly Ile Lys Lys Met Lys Thr Ser Cys
 130 135 140

Lys Phe Lys Ile Asp Ser Asn Ile Ser Pro Lys Lys Asp Ser Lys Glu
 145 150 155 160

Phe Thr Gln Lys Asn Lys Lys Glu Lys Lys Asn Ile Val Gln His Thr
 165 170 175

Thr Asp Ser Ser Leu Glu Glu Lys Gln Arg Thr Leu Asp Ser Gly Thr
 180 185 190

Ser Glu Ile Val Lys Ser Pro Arg Ile Glu Cys Ser Lys Thr Arg Arg
 195 200 205

Glu Met Gln Ser Val Val Gln Leu Ile Met Thr Arg Asp Ser Asp Gly
 210 215 220

Tyr Glu Asn Ser Thr Asp Gly Glu Met Cys Asp Lys Asp Ala Leu Glu
 225 230 235 240

Glu Asp Ser Glu Ser Val Ser Glu Ile Gly Ser Asp Glu Glu Ser Glu
 245 250 255

Asn Glu Ile Thr Ser Val Gly Arg Ala Ser Gly Asp Asp Asp Gly Ser
 260 265 270

Glu Asp Asp Glu Glu Glu Asp Glu Asp Glu Glu Glu Asp Glu Asp Glu
 275 280 285

Asp Ser Glu Asp Asp Asp Lys Ser Asp Ser Gly Pro Asp Leu Ala Arg
 290 295 300

Gly Lys Gly Asn Ile Glu Thr Ser Ser Glu Asp Glu Asp Asp Thr Ala
 305 310 315 320

Asp Leu Phe Pro Glu Glu Ser Gly Phe Glu His Ala Trp Arg Glu Leu
 325 330 335

Asp Lys Asp Ala Pro Arg Ala Asp Glu Ile Thr Arg Arg Leu Ala Val
 340 345 350

Cys Asn Met Asp Trp Asp Arg Leu Lys Ala Lys Asp Leu Leu Ala Leu
 355 360 365

Phe Asn Ser Phe Lys Pro Lys Gly Gly Val Ile Phe Ser Val Lys Ile
 370 375 380

Tyr Pro Ser Glu Phe Gly Lys Glu Arg Met Lys Glu Glu Gln Val Gln
 385 390 395 400

Gly Pro Val Glu Leu Leu Ser Ile Pro Glu Asp Ala Pro Glu Lys Asp
 405 410 415

Trp Thr Ser Arg Glu Lys Leu Arg Asp Tyr Gln Phe Lys Arg Leu Lys
 420 425 430

Tyr Tyr Tyr Ala Val Val Asp Cys Asp Ser Pro Glu Thr Ala Ser Lys
 435 440 445

Ile Tyr Glu Asp Cys Asp Gly Leu Glu Phe Glu Ser Ser Cys Ser Phe
 450 455 460

Ile Asp Leu Arg Phe Ile Pro Asp Asp Ile Thr Phe Asp Asp Glu Pro
 465 470 475 480

Lys Asp Val Ala Ser Glu Val Asn Leu Thr Ala Tyr Lys Pro Lys Tyr
 485 490 495

Phe Thr Ser Ala Ala Met Gly Thr Ser Thr Val Glu Ile Thr Trp Asp
 500 505 510

Glu Thr Asp His Glu Arg Ile Thr Met Leu Asn Arg Lys Phe Lys Lys
 515 520 525

Glu Glu Leu Leu Asp Met Asp Phe Gln Ala Tyr Leu Ala Ser Ser Ser
 530 535 540

Glu Asp Glu Glu Glu Ile Glu Glu Glu Leu Gln Gly Asp Asp Gly Val
 545 550 555 560

Asn Val Glu Glu Asp Gly Lys Thr Lys Lys Ser Gln Lys Asp Asp Glu
 565 570 575

Glu Gln Ile Ala Lys Tyr Arg Gln Leu Leu Gln Val Ile Gln Glu Lys
 580 585 590

Glu Lys Lys Gly Lys Glu Asn Asp Met Glu Met Glu Ile Lys Trp Val
 595 600 605

Pro Gly Leu Lys Glu Ser Ala Glu Glu Met Val Lys Asn Lys Leu Glu
 610 615 620

Gly Lys Asp Lys Leu Thr Pro Trp Glu Gln Phe Leu Glu Lys Lys Lys
 625 630 635 640

Glu Lys Lys Arg Leu Lys Arg Lys Gln Lys Ala Leu Ala Glu Glu Ala
 645 650 655

Ser Glu Glu Glu Leu Pro Ser Asp Val Asp Leu Asn Asp Pro Tyr Phe
 660 665 670

Ala Glu Glu Val Lys Gln Ile Gly Ile Asn Lys Lys Ser Val Lys Ser
 675 680 685

Ala Lys Asp Gly Thr Ser Pro Glu Glu Glu Ile Glu Ile Glu Arg Gln
 690 695 700

Lys Ala Glu Met Ala Leu Leu Met Met Asp Glu Asp Glu Asp Ser Lys
 705 710 715 720

Lys His Phe Asn Tyr Asn Lys Ile Val Glu His Gln Asn Leu Ser Lys
 725 730 735

Lys Lys Lys Lys Gln Leu Met Lys Lys Lys Glu Leu Ile Glu Asp Asp

740

745

750

Phe Glu Val Asn Val Asn Asp Ala Arg Phe Gln Ala Met Tyr Thr Ser
 755 760 765

His Leu Phe Asn Leu Asp Pro Ser Asp Pro Asn Phe Lys Lys Thr Lys
 770 775 780

Ala Met Glu Lys Ile Leu Glu Glu Lys Ala Arg Gln Arg Glu Arg Lys
 785 790 795 800

Glu Gln Glu Leu Thr Gln Ala Ile Lys Lys Lys Glu Ser Glu Ile Glu
 805 810 815

Lys Glu Ser Gln Arg Lys Ser Ile Asp Pro Ala Leu Ser Met Leu Ile
 820 825 830

Lys Ser Ile Lys Thr Lys Thr Glu Gln Phe Gln Ala Arg Lys Lys Gln
 835 840 845

Lys Val Lys
 850

<210> 2598
 <211> 244
 <212> PRT
 <213> Homo sapiens

<400> 2598

Met Val Tyr Lys Thr Leu Phe Ala Leu Cys Ile Leu Thr Ala Gly Trp
 1 5 10 15

Arg Val Gln Ser Leu Pro Thr Ser Ala Pro Leu Ser Val Ser Leu Pro
 20 25 30

Thr Asn Ile Val Pro Pro Thr Thr Ile Trp Thr Ser Ser Pro Gln Asn
 35 40 45

Thr Asp Ala Asp Thr Ala Ser Pro Ser Asn Gly Thr His Asn Asn Ser
 50 55 60

Val Leu Pro Val Thr Ala Ser Ala Pro Thr Ser Leu Leu Pro Lys Asn
 65 70 75 80

Ile Ser Ile Glu Ser Arg Glu Glu Glu Ile Thr Ser Pro Gly Ser Asn
 85 90 95

Trp Glu Gly Thr Asn Thr Asp Pro Ser Pro Ser Gly Phe Ser Ser Thr
 100 105 110

Ser Gly Gly Val His Leu Thr Thr Thr Leu Glu Glu His Ser Leu Gly
 115 120 125

Thr Pro Glu Ala Gly Val Ala Ala Thr Leu Ser Gln Ser Ala Ala Glu
 130 135 140

Pro Pro Thr Leu Ile Ser Pro Gln Ala Pro Ala Ser Ser Pro Ser Ser
 145 150 155 160

Leu Ser Thr Ser Pro Pro Glu Val Phe Ser Ala Ser Val Thr Thr Asn
 165 170 175

His Ser Ser Thr Val Thr Ser Thr Gln Pro Thr Gly Ala Pro Thr Ala
 180 185 190

Pro Glu Ser Pro Thr Glu Glu Ser Ser Ser Asp His Thr Pro Thr Ser
 195 200 205

His Ala Thr Ala Glu Pro Val Pro Gln Glu Lys Thr Pro Pro Thr Thr
 210 215 220

Val Ser Gly Lys Val Met Cys Glu Leu Ile Asp Met Glu Thr Pro Pro
 225 230 235 240

Pro Phe Pro Gly

<210> 2599

<211> 395

<212> PRT

<213> Homo sapiens

<400> 2599

Met Pro Gly Arg Ser Cys Val Ala Leu Val Leu Leu Ala Ala Val
 1 5 10 15

Ser Cys Ala Val Ala Gln His Ala Pro Pro Trp Thr Glu Asp Cys Arg
 20 25 30

Lys Ser Thr Tyr Pro Pro Ser Gly Pro Thr Tyr Arg Gly Ala Val Pro
 35 40 45

Trp Tyr Thr Ile Asn Leu Asp Leu Pro Pro Tyr Lys Arg Trp His Glu

50

55

60

Leu Met Leu Asp Lys Ala Pro Met Leu Lys Val Ile Val Asn Ser Leu
 65 70 75 80

Lys Asn Met Ile Asn Thr Phe Val Pro Ser Gly Lys Val Met Gln Val
 85 90 95

Val Asp Glu Lys Leu Pro Gly Leu Leu Gly Asn Phe Pro Gly Pro Phe
 100 105 110

Glu Glu Glu Met Lys Gly Ile Ala Ala Val Thr Asp Ile Pro Leu Gly
 115 120 125

Glu Ile Ile Ser Phe Asn Ile Phe Tyr Glu Leu Phe Thr Ile Cys Thr
 130 135 140

Ser Ile Val Ala Glu Asp Lys Lys Gly His Leu Ile His Gly Arg Asn
 145 150 155 160

Met Asp Phe Gly Val Phe Leu Gly Trp Asn Ile Asn Asn Asp Thr Trp
 165 170 175

Val Ile Thr Glu Gln Leu Lys Pro Leu Thr Val Asn Leu Asp Phe Gln
 180 185 190

Arg Asn Asn Lys Thr Val Phe Lys Ala Ser Ser Phe Ala Gly Tyr Val
 195 200 205

Gly Met Leu Thr Gly Phe Lys Pro Gly Leu Phe Ser Leu Thr Leu Asn
 210 215 220

Glu Arg Phe Ser Ile Asn Gly Gly Tyr Leu Gly Ile Leu Glu Trp Ile
 225 230 235 240

Leu Gly Lys Lys Asp Ala Met Trp Ile Gly Phe Leu Thr Arg Thr Val
 245 250 255

Leu Glu Asn Ser Thr Ser Tyr Glu Glu Ala Lys Asn Leu Leu Thr Lys
 260 265 270

Thr Lys Ile Leu Ala Pro Ala Tyr Phe Ile Leu Gly Gly Asn Gln Ser
 275 280 285

Gly Glu Gly Cys Val Ile Thr Arg Asp Arg Lys Glu Ser Leu Asp Val
 290 295 300

Tyr Glu Leu Asp Ala Lys Gln Gly Arg Trp Tyr Val Val Gln Thr Asn
 305 310 315 320

Tyr Asp Arg Trp Lys His Pro Phe Phe Leu Asp Asp Arg Arg Thr Pro
 325 330 335

Ala Lys Met Cys Leu Asn Arg Thr Ser Gln Glu Asn Ile Ser Phe Glu
 340 345 350

Thr Met Tyr Asp Val Leu Ser Thr Lys Pro Val Leu Asn Lys Leu Thr
 355 360 365

Val Tyr Thr Thr Leu Ile Asp Val Thr Lys Gly Gln Phe Glu Thr Tyr
 370 375 380

Leu Arg Asp Cys Pro Asp Pro Cys Ile Gly Trp
 385 390 395

<210> 2600
 <211> 282
 <212> PRT
 <213> Homo sapiens

<400> 2600

Met Ser Leu Leu Ala Thr Leu Gly Leu Glu Leu Asp Arg Ala Leu Leu
 1 5 10 15

Pro Ala Ser Gly Leu Gly Trp Leu Val Asp Tyr Gly Lys Leu Pro Pro
 20 25 30

Ala Pro Ala Pro Leu Ala Pro Tyr Glu Val Leu Gly Gly Ala Leu Glu
 35 40 45

Gly Gly Leu Pro Val Gly Gly Glu Pro Leu Ala Gly Asp Gly Phe Ser
 50 55 60

Asp Trp Met Thr Glu Arg Val Asp Phe Thr Ala Leu Leu Pro Leu Glu
 65 70 75 80

Pro Pro Leu Pro Pro Gly Thr Leu Pro Gln Pro Ser Pro Thr Pro Pro
 85 90 95

Asp Leu Glu Ala Met Ala Ser Leu Leu Lys Lys Glu Leu Glu Gln Met
 100 105 110

Glu Asp Phe Phe Leu Asp Ala Pro Pro Leu Pro Pro Pro Ser Pro Pro
 115 120 125

Pro Leu Pro Pro Pro Pro Leu Pro Pro Ala Pro Ser Leu Pro Leu Ser
 130 135 140

Leu Pro Ser Phe Asp Leu Pro Gln Pro Pro Val Leu Asp Thr Leu Asp
 145 150 155 160

Leu Leu Ala Ile Tyr Cys Arg Asn Glu Ala Gly Gln Glu Glu Val Gly
 165 170 175

Met Pro Pro Leu Pro Pro Pro Gln Gln Pro Pro Pro Pro Ser Pro Pro
 180 185 190

Gln Pro Ser Arg Leu Ala Pro Tyr Pro His Pro Ala Thr Thr Arg Gly
 195 200 205

Asp Arg Lys Gln Lys Lys Arg Asp Gln Asn Lys Ser Ala Ala Leu Arg
 210 215 220

Tyr Arg Gln Arg Lys Arg Ala Glu Gly Glu Ala Leu Glu Gly Glu Cys
 225 230 235 240

Gln Gly Leu Glu Ala Arg Asn Arg Glu Leu Lys Glu Arg Ala Glu Ser
 245 250 255

Val Glu Arg Glu Ile Gln Tyr Val Lys Asp Leu Leu Ile Glu Val Tyr
 260 265 270

Lys Ala Arg Ser Gln Arg Thr Arg Ser Cys
 275 280

<210> 2601
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 2601

Met Glu Thr Ser Glu Gly Pro Gly Leu Glu Ser Thr Gly Ser Tyr Leu
 1 5 10 15

Gly Ile Gln Gln Arg Ser Pro
 20

<210> 2602
 <211> 491

<212> PRT

<213> Homo sapiens

<400> 2602

Met Cys Asn Thr Asn Met Ser Val Pro Thr Asp Gly Ala Val Thr Thr
 1 5 10 15

Ser Gln Ile Pro Ala Ser Glu Gln Glu Thr Leu Val Arg Pro Lys Pro
 20 25 30

Leu Leu Leu Lys Leu Leu Lys Ser Val Gly Ala Gln Lys Asp Thr Tyr
 35 40 45

Thr Met Lys Glu Val Leu Phe Tyr Leu Gly Gln Tyr Ile Met Thr Lys
 50 55 60

Arg Leu Tyr Asp Glu Lys Gln Gln His Ile Val Tyr Cys Ser Asn Asp
 65 70 75 80

Leu Leu Gly Asp Leu Phe Gly Val Pro Ser Phe Ser Val Lys Glu His
 85 90 95

Arg Lys Ile Tyr Thr Met Ile Tyr Arg Asn Leu Val Val Val Asn Gln
 100 105 110

Gln Glu Ser Ser Asp Ser Gly Thr Ser Val Ser Glu Asn Arg Cys His
 115 120 125

Leu Glu Gly Gly Ser Asp Gln Lys Asp Leu Val Gln Glu Leu Gln Glu
 130 135 140

Glu Lys Pro Ser Ser Ser His Leu Val Ser Arg Pro Ser Thr Ser Ser
 145 150 155 160

Arg Arg Arg Ala Ile Ser Glu Thr Glu Glu Asn Ser Asp Glu Leu Ser
 165 170 175

Gly Glu Arg Gln Arg Lys Arg His Lys Ser Asp Ser Ile Ser Leu Ser
 180 185 190

Phe Asp Glu Ser Leu Ala Leu Cys Val Ile Arg Glu Ile Cys Cys Glu
 195 200 205

Arg Ser Ser Ser Ser Glu Ser Thr Gly Thr Pro Ser Asn Pro Asp Leu
 210 215 220

Asp Ala Gly Val Ser Glu His Ser Gly Asp Trp Leu Asp Gln Asp Ser
 225 230 235 240

Val Ser Asp Gln Phe Ser Val Glu Phe Glu Val Glu Ser Leu Asp Ser
 245 250 255

Glu Asp Tyr Ser Leu Ser Glu Glu Gly Gln Glu Leu Ser Asp Glu Asp
 260 265 270

Asp Glu Val Tyr Gln Val Thr Val Tyr Gln Ala Gly Glu Ser Asp Thr
 275 280 285

Asp Ser Phe Glu Glu Asp Pro Glu Ile Ser Leu Ala Asp Tyr Trp Lys
 290 295 300

Cys Thr Ser Cys Asn Glu Met Asn Pro Pro Leu Pro Ser His Cys Asn
 305 310 315 320

Arg Cys Trp Ala Leu Arg Glu Asn Trp Leu Pro Glu Asp Lys Gly Lys
 325 330 335

Asp Lys Gly Glu Ile Ser Glu Lys Ala Lys Leu Glu Asn Ser Thr Gln
 340 345 350

Ala Glu Glu Gly Phe Asp Val Pro Asp Cys Lys Lys Thr Ile Val Asn
 355 360 365

Asp Ser Arg Glu Ser Cys Val Glu Glu Asn Asp Asp Lys Ile Thr Gln
 370 375 380

Ala Ser Gln Ser Gln Glu Ser Glu Asp Tyr Ser Gln Pro Ser Thr Ser
 385 390 395 400

Ser Ser Ile Ile Tyr Ser Ser Gln Glu Asp Val Lys Glu Phe Glu Arg
 405 410 415

Glu Glu Thr Gln Asp Lys Glu Glu Ser Val Glu Ser Ser Leu Pro Leu
 420 425 430

Asn Ala Ile Glu Pro Cys Val Ile Cys Gln Gly Arg Pro Lys Asn Gly
 435 440 445

Cys Ile Val His Gly Lys Thr Gly His Leu Met Ala Cys Phe Thr Cys
 450 455 460

Ala Lys Lys Leu Lys Lys Arg Asn Lys Pro Cys Pro Val Cys Arg Gln

465

470

475

480

Pro Ile Gln Met Ile Val Leu Thr Tyr Phe Pro
 485 490

<210> 2603
 <211> 950
 <212> PRT
 <213> Homo sapiens
 <400> 2603

Met Gly Val Pro Ala Phe Phe Arg Trp Leu Ser Arg Lys Tyr Pro Ser
 1 5 10 15

Ile Ile Val Asn Cys Val Glu Glu Lys Pro Lys Glu Cys Asn Gly Val
 20 25 30

Lys Ile Pro Val Asp Ala Ser Lys Pro Asn Pro Asn Asp Val Glu Phe
 35 40 45

Asp Asn Leu Tyr Leu Asp Met Asn Gly Ile Ile His Pro Cys Thr His
 50 55 60

Pro Glu Asp Lys Pro Ala Pro Lys Asn Glu Asp Glu Met Met Val Ala
 65 70 75 80

Ile Phe Glu Tyr Ile Asp Arg Leu Phe Ser Ile Val Arg Pro Arg Arg
 85 90 95

Leu Leu Tyr Met Ala Ile Asp Gly Val Ala Pro Arg Ala Lys Met Asn
 100 105 110

Gln Gln Arg Ser Arg Arg Phe Arg Ala Ser Lys Glu Gly Met Glu Ala
 115 120 125

Ala Val Glu Lys Gln Arg Val Arg Glu Glu Ile Leu Ala Lys Gly Gly
 130 135 140

Phe Leu Pro Pro Glu Glu Ile Lys Glu Arg Phe Asp Ser Asn Cys Ile
 145 150 155 160

Thr Pro Gly Thr Glu Phe Met Asp Asn Leu Ala Lys Cys Leu Arg Tyr
 165 170 175

Tyr Ile Ala Asp Arg Leu Asn Asn Asp Pro Gly Trp Lys Asn Leu Thr
 180 185 190

Val Ile Leu Ser Asp Ala Ser Ala Pro Gly Glu Gly Glu His Lys Ile
 195 200 205

Met Asp Tyr Ile Arg Arg Gln Arg Ala Gln Pro Asn His Asp Pro Asn
 210 215 220

Thr His His Cys Leu Cys Gly Ala Asp Ala Asp Leu Ile Met Leu Gly
 225 230 235 240

Leu Ala Thr His Glu Pro Asn Phe Thr Ile Ile Arg Glu Glu Phe Lys
 245 250 255

Pro Asn Lys Pro Lys Pro Cys Gly Leu Cys Asn Gln Phe Gly His Glu
 260 265 270

Val Lys Asp Cys Glu Gly Leu Pro Arg Glu Lys Lys Gly Lys His Asp
 275 280 285

Glu Leu Ala Asp Ser Leu Pro Cys Ala Glu Gly Glu Phe Ile Phe Leu
 290 295 300

Arg Leu Asn Val Leu Arg Glu Tyr Leu Glu Arg Glu Leu Thr Met Ala
 305 310 315 320

Ser Leu Pro Phe Thr Phe Asp Val Glu Arg Ser Ile Asp Asp Trp Val
 325 330 335

Phe Met Cys Phe Phe Val Gly Asn Asp Phe Leu Pro His Leu Pro Ser
 340 345 350

Leu Glu Ile Arg Glu Asn Ala Ile Asp Arg Leu Val Asn Ile Tyr Lys
 355 360 365

Asn Val Val His Lys Thr Gly Gly Tyr Leu Thr Glu Ser Gly Tyr Val
 370 375 380

Asn Leu Gln Arg Val Gln Met Ile Met Leu Ala Val Gly Glu Val Glu
 385 390 395 400

Asp Ser Ile Phe Lys Lys Arg Lys Asp Asp Glu Asp Ser Phe Arg Arg
 405 410 415

Arg Gln Lys Glu Lys Arg Lys Arg Met Lys Arg Asp Gln Pro Ala Phe
 420 425 430

Thr Pro Ser Gly Ile Leu Thr Pro His Ala Leu Gly Ser Arg Asn Ser
 435 440 445

Pro Gly Ser Gln Val Ala Ser Asn Pro Arg Gln Ala Ala Tyr Glu Met
 450 455 460

Arg Met Gln Asn Asn Ser Ser Pro Ser Ile Ser Pro Asn Thr Ser Phe
 465 470 475 480

Thr Ser Asp Gly Ser Pro Ser Pro Leu Gly Gly Ile Lys Arg Lys Ala
 485 490 495

Glu Asp Ser Asp Ser Glu Pro Glu Pro Glu Asp Asn Val Arg Leu Trp
 500 505 510

Glu Ala Gly Trp Lys Gln Arg Tyr Tyr Lys Asn Lys Phe Asp Val Asp
 515 520 525

Ala Ala Asp Glu Lys Phe Arg Arg Lys Val Val Gln Ser Tyr Val Glu
 530 535 540

Gly Leu Cys Trp Val Leu Arg Tyr Tyr Tyr Gln Gly Cys Ala Ser Trp
 545 550 555 560

Lys Trp Tyr Tyr Pro Phe His Tyr Ala Pro Phe Ala Ser Asp Phe Glu
 565 570 575

Gly Ile Ala Asp Met Pro Ser Asp Phe Glu Lys Gly Thr Lys Pro Phe
 580 585 590

Lys Pro Leu Glu Gln Leu Met Gly Val Phe Pro Ala Ala Ser Gly Asn
 595 600 605

Phe Leu Pro Pro Ser Trp Arg Lys Leu Met Ser Asp Pro Asp Ser Ser
 610 615 620

Ile Ile Asp Phe Tyr Pro Glu Asp Phe Ala Ile Asp Leu Asn Gly Lys
 625 630 635 640

Lys Tyr Ala Trp Gln Gly Val Ala Leu Leu Pro Phe Val Asp Glu Arg
 645 650 655

Arg Leu Arg Ala Ala Leu Glu Glu Val Tyr Pro Asp Leu Thr Pro Glu
 660 665 670

Glu Thr Arg Arg Asn Ser Leu Gly Gly Asp Val Leu Phe Val Gly Lys

675					680					685					
His	His	Pro	Leu	His	Asp	Phe	Ile	Leu	Glu	Leu	Tyr	Gln	Thr	Gly	Ser
690					695					700					
Thr	Glu	Pro	Val	Glu	Val	Pro	Pro	Glu	Leu	Cys	His	Gly	Ile	Gln	Gly
705					710					715					720
Lys	Phe	Ser	Leu	Asp	Glu	Glu	Ala	Ile	Leu	Pro	Asp	Gln	Ile	Val	Cys
				725					730					735	
Ser	Pro	Val	Pro	Met	Leu	Arg	Asp	Leu	Thr	Gln	Asn	Thr	Val	Val	Ser
				740				745					750		
Ile	Asn	Phe	Lys	Asp	Pro	Gln	Phe	Ala	Glu	Asp	Tyr	Ile	Phe	Lys	Ala
		755					760					765			
Val	Met	Leu	Pro	Gly	Ala	Arg	Lys	Pro	Ala	Ala	Val	Leu	Lys	Pro	Ser
	770					775					780				
Asp	Trp	Glu	Lys	Ser	Ser	Asn	Gly	Arg	Gln	Trp	Lys	Pro	Gln	Leu	Gly
785					790					795					800
Phe	Asn	Arg	Asp	Arg	Arg	Pro	Val	His	Leu	Asp	Gln	Ala	Ala	Phe	Arg
				805					810					815	
Thr	Leu	Gly	His	Val	Met	Pro	Arg	Gly	Ser	Gly	Thr	Gly	Ile	Tyr	Ser
			820					825					830		
Asn	Ala	Ala	Pro	Pro	Pro	Val	Thr	Tyr	Gln	Gly	Asn	Leu	Tyr	Arg	Pro
		835					840					845			
Leu	Leu	Arg	Gly	Gln	Ala	Gln	Ile	Pro	Lys	Leu	Met	Ser	Asn	Met	Arg
	850					855					860				
Pro	Gln	Asp	Ser	Trp	Arg	Gly	Pro	Pro	Pro	Leu	Phe	Gln	Gln	Gln	Arg
865					870					875					880
Phe	Asp	Arg	Gly	Val	Gly	Ala	Glu	Pro	Leu	Leu	Pro	Trp	Asn	Arg	Met
				885					890					895	
Leu	Gln	Thr	Gln	Asn	Ala	Ala	Phe	Gln	Pro	Asn	Gln	Tyr	Gln	Met	Leu
			900				905					910			
Ala	Gly	Pro	Gly	Gly	Tyr	Pro	Pro	Arg	Arg	Asp	Asp	Arg	Gly	Gly	Arg
		915				920					925				

Gln Gly Tyr Pro Arg Glu Gly Arg Lys Tyr Pro Leu Pro Pro Pro Ser
 930 935 940

Gly Arg Tyr Asn Trp Asn
 945 950

<210> 2604

<211> 313

<212> PRT

<213> Homo sapiens

<400> 2604

Met Ser Gln Ser Arg His Arg Ala Glu Ala Pro Pro Leu Glu Arg Glu
 1 5 10 15

Asp Ser Gly Thr Phe Ser Leu Gly Lys Met Ile Thr Ala Lys Pro Gly
 20 25 30

Lys Thr Pro Ile Gln Val Leu His Glu Tyr Gly Met Lys Thr Lys Asn
 35 40 45

Ile Pro Val Tyr Glu Cys Glu Arg Ser Asp Val Gln Ile His Val Pro
 50 55 60

Thr Phe Thr Phe Arg Val Thr Val Gly Asp Ile Thr Cys Thr Gly Glu
 65 70 75 80

Gly Thr Ser Lys Lys Leu Ala Lys His Arg Ala Ala Glu Ala Ala Ile
 85 90 95

Asn Ile Leu Lys Ala Asn Ala Ser Ile Cys Phe Ala Val Pro Asp Pro
 100 105 110

Leu Met Pro Asp Pro Ser Lys Gln Pro Lys Asn Gln Leu Asn Pro Ile
 115 120 125

Gly Ser Leu Gln Glu Leu Ala Ile His His Gly Trp Arg Leu Pro Glu
 130 135 140

Tyr Thr Leu Ser Gln Glu Gly Gly Pro Ala His Lys Arg Glu Tyr Thr
 145 150 155 160

Thr Ile Cys Arg Leu Glu Ser Phe Met Glu Thr Gly Lys Gly Ala Ser
 165 170 175

Lys Lys Gln Ala Lys Arg Asn Ala Ala Glu Lys Phe Leu Ala Lys Phe
 180 185 190

Ser Asn Ile Ser Pro Glu Asn His Ile Ser Leu Thr Asn Val Val Gly
 195 200 205

His Ser Leu Gly Cys Thr Trp His Ser Leu Arg Asn Ser Pro Gly Glu
 210 215 220

Lys Ile Asn Leu Leu Lys Arg Ser Leu Leu Ser Ile Pro Asn Thr Asp
 225 230 235 240

Tyr Ile Gln Leu Leu Ser Glu Ile Ala Lys Glu Gln Gly Phe Asn Ile
 245 250 255

Thr Tyr Leu Asp Ile Asp Glu Leu Ser Ala Asn Gly Gln Tyr Gln Cys
 260 265 270

Leu Ala Glu Leu Ser Thr Ser Pro Ile Thr Val Cys His Gly Ser Gly
 275 280 285

Ile Ser Cys Gly Asn Ala Gln Ser Asp Ala Ala His Asn Ala Leu Gln
 290 295 300

Tyr Leu Lys Ile Ile Ala Glu Arg Lys
 305 310

<210> 2605
 <211> 198
 <212> PRT
 <213> Homo sapiens

<400> 2605

Met Ser Asn Val Arg Val Ser Asn Gly Ser Pro Ser Leu Glu Arg Met
 1 5 10 15

Asp Ala Arg Gln Ala Glu His Pro Lys Pro Ser Ala Cys Arg Asn Leu
 20 25 30

Phe Gly Pro Val Asp His Glu Glu Leu Thr Arg Asp Leu Glu Lys His
 35 40 45

Cys Arg Asp Met Glu Glu Ala Ser Gln Arg Lys Trp Asn Phe Asp Phe
 50 55 60

Gln Asn His Lys Pro Leu Glu Gly Lys Tyr Glu Trp Gln Glu Val Glu
 65 70 75 80

Lys Gly Ser Leu Pro Glu Phe Tyr Tyr Arg Pro Pro Arg Pro Pro Lys
 85 90 95

Gly Ala Cys Lys Val Pro Ala Gln Glu Ser Gln Asp Val Ser Gly Ser
 100 105 110

Arg Pro Ala Ala Pro Leu Ile Gly Ala Pro Ala Asn Ser Glu Asp Thr
 115 120 125

His Leu Val Asp Pro Lys Thr Asp Pro Ser Asp Ser Gln Thr Gly Leu
 130 135 140

Ala Glu Gln Cys Ala Gly Ile Arg Lys Arg Pro Ala Thr Asp Asp Ser
 145 150 155 160

Ser Thr Gln Asn Lys Arg Ala Asn Arg Thr Glu Glu Asn Val Ser Asp
 165 170 175

Gly Ser Pro Asn Ala Gly Ser Val Glu Gln Thr Pro Lys Lys Pro Gly
 180 185 190

Leu Arg Arg Arg Gln Thr
 195

<210> 2606

<211> 727

<212> PRT

<213> Homo sapiens

<400> 2606

Met Arg Pro Leu Leu Leu Leu Ala Leu Leu Gly Trp Leu Leu Leu Ala
 1 5 10 15

Glu Ala Lys Gly Asp Ala Lys Pro Glu Asp Asn Leu Leu Val Leu Thr
 20 25 30

Val Ala Thr Lys Glu Thr Glu Gly Phe Arg Arg Phe Lys Arg Ser Ala
 35 40 45

Gln Phe Phe Asn Tyr Lys Ile Gln Ala Leu Gly Leu Gly Glu Asp Trp
 50 55 60

Asn Val Glu Lys Gly Thr Ser Ala Gly Gly Gly Gln Lys Val Arg Leu
 65 70 75 80

Leu Lys Lys Ala Leu Glu Lys His Ala Asp Lys Glu Asp Leu Val Ile
 85 90 95

Leu Phe Thr Asp Ser Tyr Asp Val Leu Phe Ala Ser Gly Pro Arg Glu
 100 105 110

Leu Leu Lys Lys Phe Arg Gln Ala Arg Ser Gln Val Val Phe Ser Ala
 115 120 125

Glu Glu Leu Ile Tyr Pro Asp Arg Arg Leu Glu Thr Lys Tyr Pro Val
 130 135 140

Val Ser Asp Gly Lys Arg Phe Leu Gly Ser Gly Gly Phe Ile Gly Tyr
 145 150 155 160

Ala Pro Asn Leu Ser Lys Leu Val Ala Glu Trp Glu Gly Gln Asp Ser
 165 170 175

Asp Ser Asp Gln Leu Phe Tyr Thr Lys Ile Phe Leu Asp Pro Glu Lys
 180 185 190

Arg Glu Gln Ile Asn Ile Thr Leu Asp His Arg Cys Arg Ile Phe Gln
 195 200 205

Asn Leu Asp Gly Ala Leu Asp Glu Val Val Leu Lys Phe Glu Met Gly
 210 215 220

His Val Arg Ala Arg Asn Leu Ala Tyr Asp Thr Leu Pro Val Leu Ile
 225 230 235 240

His Gly Asn Gly Pro Thr Lys Leu Gln Leu Asn Tyr Leu Gly Asn Tyr
 245 250 255

Ile Pro Arg Phe Trp Thr Phe Glu Thr Gly Cys Thr Val Cys Asp Glu
 260 265 270

Gly Leu Arg Ser Leu Lys Gly Ile Gly Asp Glu Ala Leu Pro Thr Val
 275 280 285

Leu Val Gly Val Phe Ile Glu Gln Pro Thr Pro Phe Val Ser Leu Phe
 290 295 300

Phe Gln Arg Leu Leu Arg Leu His Tyr Pro Gln Lys His Met Arg Leu
 305 310 315 320

Phe Ile His Asn His Glu Gln His His Lys Ala Gln Val Glu Glu Phe

325

330

335

Leu Ala Gln His Gly Ser Glu Tyr Gln Ser Val Lys Leu Val Gly Pro
 340 345 350

Glu Val Arg Met Ala Asn Ala Asp Ala Arg Asn Met Gly Ala Asp Leu
 355 360 365

Cys Arg Gln Asp Arg Ser Cys Thr Tyr Tyr Phe Ser Val Asp Ala Asp
 370 375 380

Val Ala Leu Thr Glu Pro Asn Ser Leu Arg Leu Leu Ile Gln Gln Asn
 385 390 395 400

Lys Asn Val Ile Ala Pro Leu Met Thr Arg His Gly Arg Leu Trp Ser
 405 410 415

Asn Phe Trp Gly Ala Leu Ser Ala Asp Gly Tyr Tyr Ala Arg Ser Glu
 420 425 430

Asp Tyr Val Asp Ile Val Gln Gly Arg Arg Val Gly Val Trp Asn Val
 435 440 445

Pro Tyr Ile Ser Asn Ile Tyr Leu Ile Lys Gly Ser Ala Leu Arg Gly
 450 455 460

Glu Leu Gln Ser Ser Asp Leu Phe His His Ser Lys Leu Asp Pro Asp
 465 470 475 480

Met Ala Phe Cys Ala Asn Ile Arg Gln Gln Asp Val Phe Met Phe Leu
 485 490 495

Thr Asn Arg His Thr Leu Gly His Leu Leu Ser Leu Asp Ser Tyr Arg
 500 505 510

Thr Thr His Leu His Asn Asp Leu Trp Glu Val Phe Ser Asn Pro Glu
 515 520 525

Asp Trp Lys Glu Lys Tyr Ile His Gln Asn Tyr Thr Lys Ala Leu Ala
 530 535 540

Gly Lys Leu Val Glu Thr Pro Cys Pro Asp Val Tyr Trp Phe Pro Ile
 545 550 555 560

Phe Thr Glu Val Ala Cys Asp Glu Leu Val Glu Glu Met Glu His Phe
 565 570 575

Gly Gln Trp Ser Leu Gly Asn Asn Lys Asp Asn Arg Ile Gln Gly Gly
 580 585 590

Tyr Glu Asn Val Pro Thr Ile Asp Ile His Met Asn Gln Ile Gly Phe
 595 600 605

Glu Arg Glu Trp His Lys Phe Leu Leu Glu Tyr Ile Ala Pro Met Thr
 610 615 620

Glu Lys Leu Tyr Pro Gly Tyr Tyr Thr Arg Ala Gln Phe Asp Leu Ala
 625 630 635 640

Phe Val Val Arg Tyr Lys Pro Asp Glu Gln Pro Ser Leu Met Pro His
 645 650 655

His Asp Ala Ser Thr Phe Thr Ile Asn Ile Ala Leu Asn Arg Val Gly
 660 665 670

Val Asp Tyr Glu Gly Gly Gly Cys Arg Phe Leu Arg Tyr Asn Cys Ser
 675 680 685

Ile Arg Ala Pro Arg Lys Gly Trp Thr Leu Met His Pro Gly Arg Leu
 690 695 700

Thr His Tyr His Glu Gly Leu Pro Thr Thr Arg Gly Thr Arg Tyr Ile
 705 710 715 720

Ala Val Ser Phe Val Asp Pro
 725

<210> 2607
 <211> 537
 <212> PRT
 <213> Homo sapiens

<400> 2607

Met Ala Trp Arg Gly Ala Gly Pro Ser Val Pro Gly Ala Pro Gly Gly
 1 5 10 15

Val Gly Leu Ser Leu Gly Leu Leu Leu Gln Leu Leu Leu Leu Leu Gly
 20 25 30

Pro Ala Arg Gly Phe Gly Asp Glu Glu Glu Arg Arg Cys Asp Pro Ile
 35 40 45

Arg Ile Ser Met Cys Gln Asn Leu Gly Tyr Asn Val Thr Lys Met Pro
 50 55 60

Asn Leu Val Gly His Glu Leu Gln Thr Asp Ala Glu Leu Gln Leu Thr
 65 70 75 80

Thr Phe Thr Pro Leu Ile Gln Tyr Gly Cys Ser Ser Gln Leu Gln Phe
 85 90 95

Phe Leu Cys Ser Val Tyr Val Pro Met Cys Thr Glu Lys Ile Asn Ile
 100 105 110

Pro Ile Gly Pro Cys Gly Gly Met Cys Leu Ser Val Lys Arg Arg Cys
 115 120 125

Glu Pro Val Leu Lys Glu Phe Gly Phe Ala Trp Pro Glu Ser Leu Asn
 130 135 140

Cys Ser Lys Phe Pro Pro Gln Asn Asp His Asn His Met Cys Met Glu
 145 150 155 160

Gly Pro Gly Asp Glu Glu Val Pro Leu Pro His Lys Thr Pro Ile Gln
 165 170 175

Pro Gly Glu Glu Cys His Ser Val Gly Thr Asn Ser Asp Gln Tyr Ile
 180 185 190

Trp Val Lys Arg Ser Leu Asn Cys Val Leu Lys Cys Gly Tyr Asp Ala
 195 200 205

Gly Leu Tyr Ser Arg Ser Ala Lys Glu Phe Thr Asp Ile Trp Met Ala
 210 215 220

Val Trp Ala Ser Leu Cys Phe Ile Ser Thr Ala Phe Thr Val Leu Thr
 225 230 235 240

Phe Leu Ile Asp Ser Ser Arg Phe Ser Tyr Pro Glu Arg Pro Ile Ile
 245 250 255

Phe Leu Ser Met Cys Tyr Asn Ile Tyr Ser Ile Ala Tyr Ile Val Arg
 260 265 270

Leu Thr Val Gly Arg Glu Arg Ile Ser Cys Asp Phe Glu Glu Ala Ala
 275 280 285

Glu Pro Val Leu Ile Gln Glu Gly Leu Lys Asn Thr Gly Cys Ala Ile

290

295

300

Ile Phe Leu Leu Met Tyr Phe Phe Gly Met Ala Ser Ser Ile Trp Trp-
 305 310 315 320

Val Ile Leu Thr Leu Thr Trp Phe Leu Ala Ala Gly Leu Lys Trp Gly
 325 330 335

His Glu Ala Ile Glu Met His Ser Ser Tyr Phe His Ile Ala Ala Trp
 340 345 350

Ala Ile Pro Ala Val Lys Thr Ile Val Ile Leu Ile Met Arg Leu Val
 355 360 365

Asp Ala Asp Glu Leu Thr Gly Leu Cys Tyr Val Gly Asn Gln Asn Leu
 370 375 380

Asp Ala Leu Thr Gly Phe Val Val Ala Pro Leu Phe Thr Tyr Leu Val
 385 390 395 400

Ile Gly Thr Leu Phe Ile Ala Ala Gly Leu Val Ala Leu Phe Lys Ile
 405 410 415

Arg Ser Asn Leu Gln Lys Asp Gly Thr Lys Thr Asp Lys Leu Glu Arg
 420 425 430

Leu Met Val Lys Ile Gly Val Phe Ser Val Leu Tyr Thr Val Pro Ala
 435 440 445

Thr Cys Val Ile Ala Cys Tyr Phe Tyr Glu Ile Ser Asn Trp Ala Leu
 450 455 460

Phe Arg Tyr Ser Ala Asp Asp Ser Asn Met Ala Val Glu Met Leu Lys
 465 470 475 480

Ile Phe Met Ser Leu Leu Val Gly Ile Thr Ser Gly Met Trp Ile Trp
 485 490 495

Ser Ala Lys Thr Leu His Thr Trp Gln Lys Cys Ser Asn Arg Leu Val
 500 505 510

Asn Ser Gly Lys Val Lys Arg Glu Lys Arg Gly Asn Gly Trp Val Lys
 515 520 525

Pro Gly Lys Gly Ser Glu Thr Val Val
 530 535

<210> 2608
 <211> 362
 <212> PRT
 <213> Homo sapiens

<400> 2608

Met Leu Val Met Ala Pro Arg Thr Val Leu Leu Leu Leu Ser Ala Ala
 1 5 10 15

Leu Ala Leu Thr Glu Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe
 20 25 30

Tyr Thr Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ser
 35 40 45

Val Gly Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala
 50 55 60

Ala Ser Pro Arg Glu Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly
 65 70 75 80

Pro Glu Tyr Trp Asp Arg Asn Thr Gln Ile Tyr Lys Ala Gln Ala Gln
 85 90 95

Thr Asp Arg Glu Ser Leu Arg Asn Leu Arg Gly Tyr Tyr Asn Gln Ser
 100 105 110

Glu Ala Gly Ser His Thr Leu Gln Ser Met Tyr Gly Cys Asp Val Gly
 115 120 125

Pro Asp Gly Arg Leu Leu Arg Gly His Asp Gln Tyr Ala Tyr Asp Gly
 130 135 140

Lys Asp Tyr Ile Ala Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala
 145 150 155 160

Asp Thr Ala Ala Gln Ile Thr Gln Arg Lys Trp Glu Ala Ala Arg Glu
 165 170 175

Ala Glu Gln Arg Arg Ala Tyr Leu Glu Gly Glu Cys Val Glu Trp Leu
 180 185 190

Arg Arg Tyr Leu Glu Asn Gly Lys Asp Lys Leu Glu Arg Ala Asp Pro
 195 200 205

Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu Ala Thr
 210 215 220

Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr Leu Thr
 225 230 235 240

Trp Gln Arg Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu
 245 250 255

Thr Arg Pro Ala Gly Asp Arg Thr Phe Gln Lys Trp Ala Ala Val Val
 260 265 270

Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln His Glu
 275 280 285

Gly Leu Pro Lys Pro Leu Thr Leu Arg Trp Glu Pro Ser Ser Gln Ser
 290 295 300

Thr Val Pro Ile Val Gly Ile Val Ala Gly Leu Ala Val Leu Ala Val
 305 310 315 320

Val Val Ile Gly Ala Val Val Ala Ala Val Met Cys Arg Arg Lys Ser
 325 330 335

Ser Gly Gly Lys Gly Gly Ser Tyr Ser Gln Ala Ala Cys Ser Asp Ser
 340 345 350

Ala Gln Gly Ser Asp Val Ser Leu Thr Ala
 355 360

<210> 2609
 <211> 350
 <212> PRT
 <213> Homo sapiens

<400> 2609

Met Glu Thr Asn Ser Ser Leu Pro Thr Asn Ile Ser Gly Gly Thr Pro
 1 5 10 15

Ala Val Ser Ala Gly Tyr Leu Phe Leu Asp Ile Ile Thr Tyr Leu Val
 20 25 30

Phe Ala Val Thr Phe Val Leu Gly Val Leu Gly Asn Gly Leu Val Ile
 35 40 45

Trp Val Ala Gly Phe Arg Met Thr His Thr Val Thr Thr Ile Ser Tyr
 50 55 60

Leu Asn Leu Ala Val Ala Asp Phe Cys Phe Thr Ser Thr Leu Pro Phe
 65 70 75 80

Phe Met Val Arg Lys Ala Met Gly Gly His Trp Pro Phe Gly Trp Phe
 85 90 95

Leu Cys Lys Phe Val Phe Thr Ile Val Asp Ile Asn Leu Phe Gly Ser
 100 105 110

Val Phe Leu Ile Ala Leu Ile Ala Leu Asp Arg Cys Val Cys Val Leu
 115 120 125

His Pro Val Trp Thr Gln Asn His Arg Thr Val Ser Leu Ala Lys Lys
 130 135 140

Val Ile Ile Gly Pro Trp Val Met Ala Leu Leu Leu Thr Leu Pro Val
 145 150 155 160

Ile Ile Arg Val Thr Thr Val Pro Gly Lys Thr Gly Thr Val Ala Cys
 165 170 175

Thr Phe Asn Phe Ser Pro Trp Thr Asn Asp Pro Lys Glu Arg Ile Asn
 180 185 190

Val Ala Val Ala Met Leu Thr Val Arg Gly Ile Ile Arg Phe Ile Ile
 195 200 205

Gly Phe Ser Ala Pro Met Ser Ile Val Ala Val Ser Tyr Gly Leu Ile
 210 215 220

Ala Thr Lys Ile His Lys Gln Gly Leu Ile Lys Ser Ser Arg Pro Leu
 225 230 235 240

Arg Val Leu Ser Phe Val Ala Ala Ala Phe Phe Leu Cys Trp Ser Pro
 245 250 255

Tyr Gln Val Val Ala Leu Ile Ala Thr Val Arg Ile Arg Glu Leu Leu
 260 265 270

Gln Gly Met Tyr Lys Glu Ile Gly Ile Ala Val Asp Val Thr Ser Ala
 275 280 285

Leu Ala Phe Phe Asn Ser Cys Leu Asn Pro Met Leu Tyr Val Phe Met
 290 295 300

Gly Gln Asp Phe Arg Glu Arg Leu Ile His Ala Leu Pro Ala Ser Leu
 305 310 315 320

Glu Arg Ala Leu Thr Glu Asp Ser Thr Gln Thr Ser Asp Thr Ala Thr
 325 330 335

Asn Ser Thr Leu Pro Ser Ala Glu Val Glu Leu Gln Ala Lys
 340 345 350

<210> 2610
 <211> 638
 <212> PRT
 <213> Homo sapiens

<400> 2610

Met Ser Ala Ser Ser Ser Gly Gly Ser Pro Arg Phe Pro Ser Cys Gly
 1 5 10 15

Lys Asn Gly Val Thr Ser Leu Thr Gln Lys Lys Val Leu Arg Ala Pro
 20 25 30

Cys Gly Ala Pro Ser Val Thr Val Thr Lys Ser His Lys Arg Gly Met
 35 40 45

Lys Gly Asp Thr Val Asn Val Arg Arg Ser Val Arg Val Lys Thr Lys
 50 55 60

Asn Pro Pro His Cys Leu Glu Ile Thr Pro Pro Ser Ser Glu Lys Leu
 65 70 75 80

Val Ser Val Met Arg Leu Ser Asp Leu Ser Thr Glu Asp Asp Asp Ser
 85 90 95

Gly His Cys Lys Met Asn Arg Tyr Asp Lys Lys Ile Asp Ser Leu Met
 100 105 110

Asn Ala Val Gly Cys Leu Lys Ser Glu Val Lys Met Gln Lys Gly Glu
 115 120 125

Arg Gln Met Ala Lys Arg Phe Leu Glu Glu Arg Lys Glu Glu Leu Glu
 130 135 140

Glu Val Ala His Glu Leu Ala Glu Thr Glu His Glu Asn Thr Val Leu
 145 150 155 160

Arg His Asn Ile Glu Arg Met Lys Glu Glu Lys Asp Phe Thr Ile Leu

	165		170		175
Gln Lys Lys His Leu Gln Gln Glu Lys Glu Cys Leu Met Ser Lys Leu	180	185	190		
Val Glu Ala Glu Met Asp Gly Ala Ala Ala Lys Gln Val Met Ala	195	200	205		
Leu Lys Asp Thr Ile Gly Lys Leu Lys Thr Glu Lys Gln Met Thr Cys	210	215	220		
Thr Asp Ile Asn Thr Leu Thr Arg Gln Lys Glu Leu Leu Leu Gln Lys	225	230	235	240	
Leu Ser Thr Phe Glu Glu Thr Asn Arg Thr Leu Arg Asp Leu Leu Arg	245	250	255		
Glu Gln His Cys Lys Glu Asp Ser Glu Arg Leu Met Glu Gln Gln Gly	260	265	270		
Ala Leu Leu Lys Arg Leu Ala Glu Ala Asp Ser Glu Lys Ala Arg Leu	275	280	285		
Leu Leu Leu Leu Gln Asp Lys Asp Lys Glu Val Glu Glu Leu Leu Gln	290	295	300		
Glu Ile Gln Cys Glu Lys Ala Gln Ala Lys Thr Ala Ser Glu Leu Ser	305	310	315	320	
Lys Ser Met Glu Ser Met Arg Gly His Leu Gln Ala Gln Leu Arg Ser	325	330	335		
Lys Glu Ala Glu Asn Ser Arg Leu Cys Met Gln Ile Lys Asn Leu Glu	340	345	350		
Arg Ser Gly Asn Gln His Lys Ala Glu Val Glu Ala Ile Met Glu Gln	355	360	365		
Leu Lys Glu Leu Lys Gln Lys Gly Asp Arg Asp Lys Glu Ser Leu Lys	370	375	380		
Lys Ala Ile Arg Ala Gln Lys Glu Arg Ala Glu Lys Ser Glu Glu Tyr	385	390	395	400	
Ala Glu Gln Leu His Val Gln Leu Ala Asp Lys Asp Leu Tyr Val Ala	405	410	415		

Glu Ala Leu Ser Thr Leu Glu Ser Trp Arg Ser Arg Tyr Asn Gln Val
 420 425 430

Val Lys Glu Lys Gly Asp Leu Glu Leu Glu Ile Ile Val Leu Asn Asp
 435 440 445

Arg Val Thr Asp Leu Val Asn Gln Gln Gln Thr Leu Glu Glu Lys Met
 450 455 460

Arg Glu Asp Arg Asp Ser Leu Val Glu Arg Leu His Arg Gln Thr Ala
 465 470 475 480

Glu Tyr Ser Ala Phe Lys Leu Glu Asn Glu Arg Leu Lys Ala Ser Phe
 485 490 495

Ala Pro Met Glu Asp Lys Leu Asn Gln Ala His Leu Glu Val Gln Gln
 500 505 510

Leu Lys Ala Ser Val Lys Asn Tyr Glu Gly Met Ile Asp Asn Tyr Lys
 515 520 525

Ser Gln Val Met Lys Thr Arg Leu Glu Ala Asp Glu Val Ala Ala Gln
 530 535 540

Leu Glu Arg Cys Asp Lys Glu Asn Lys Ile Leu Lys Asp Glu Met Asn
 545 550 555 560

Lys Glu Ile Glu Ala Ala Arg Arg Gln Phe Gln Ser Gln Leu Ala Asp
 565 570 575

Leu Gln Gln Leu Pro Asp Ile Leu Lys Ile Thr Glu Ala Lys Leu Ala
 580 585 590

Glu Cys Gln Asp Gln Leu Gln Gly Tyr Glu Arg Lys Asn Ile Asp Leu
 595 600 605

Thr Ala Ile Ile Ser Asp Leu Arg Ser Arg Val Arg Asp Trp Gln Lys
 610 615 620

Gly Ser His Glu Leu Thr Arg Ala Gly Ala Arg Ile Pro Arg
 625 630 635

<210> 2611

<211> 197

<212> PRT

<213> Homo sapiens

<400> 2611

Met Thr Leu Leu Pro Gly Leu Leu Phe Leu Thr Trp Leu His Thr Cys
 1 5 10 15

Leu Ala His His Asp Pro Ser Leu Arg Gly His Pro His Ser His Gly
 20 25 30

Thr Pro His Cys Tyr Ser Ala Glu Glu Leu Pro Leu Gly Gln Ala Pro
 35 40 45

Pro His Leu Leu Ala Arg Gly Ala Lys Trp Gly Gln Ala Leu Pro Val
 50 55 60

Ala Leu Val Ser Ser Leu Glu Ala Ala Ser His Arg Gly Arg His Glu
 65 70 75 80

Arg Pro Ser Ala Thr Thr Gln Cys Pro Val Leu Arg Pro Glu Glu Val
 85 90 95

Leu Glu Ala Asp Thr His Gln Arg Ser Ile Ser Pro Trp Arg Tyr Arg
 100 105 110

Val Asp Thr Asp Glu Asp Arg Tyr Pro Gln Lys Leu Ala Phe Ala Glu
 115 120 125

Cys Leu Cys Arg Gly Cys Ile Asp Ala Arg Thr Gly Arg Glu Thr Ala
 130 135 140

Ala Leu Asn Ser Val Arg Leu Leu Gln Ser Leu Leu Val Leu Arg Arg
 145 150 155 160

Arg Pro Cys Ser Arg Asp Gly Ser Gly Leu Pro Thr Pro Gly Ala Phe
 165 170 175

Ala Phe His Thr Glu Phe Ile His Val Pro Val Gly Cys Thr Cys Val
 180 185 190

Leu Pro Arg Ser Val
 195

<210> 2612

<211> 570

<212> PRT

<213> Homo sapiens

<400> 2612

Met Asn Val Val Phe Ala Val Lys Gln Tyr Ile Ser Lys Met Ile Glu
 1 5 10 15

Asp Ser Gly Pro Gly Met Lys Val Leu Leu Met Asp Lys Glu Thr Thr
 20 25 30

Gly Ile Val Ser Met Val Tyr Thr Gln Ser Glu Ile Leu Gln Lys Glu
 35 40 45

Val Tyr Leu Phe Glu Arg Ile Asp Ser Gln Asn Arg Glu Ile Met Lys
 50 55 60

His Leu Lys Ala Ile Cys Phe Leu Arg Pro Thr Lys Glu Asn Val Asp
 65 70 75 80

Tyr Ile Ile Gln Glu Leu Arg Arg Pro Lys Tyr Thr Ile Tyr Phe Ile
 85 90 95

Tyr Phe Ser Asn Val Ile Ser Lys Ser Asp Val Lys Ser Leu Ala Glu
 100 105 110

Ala Asp Glu Gln Glu Val Val Ala Glu Val Gln Glu Phe Tyr Gly Asp
 115 120 125

Tyr Ile Ala Val Asn Pro His Leu Phe Ser Leu Asn Ile Leu Gly Cys
 130 135 140

Cys Gln Gly Arg Asn Trp Asp Pro Ala Gln Leu Ser Arg Thr Thr Gln
 145 150 155 160

Gly Leu Thr Ala Leu Leu Leu Ser Leu Lys Lys Cys Pro Met Ile Arg
 165 170 175

Tyr Gln Leu Ser Ser Glu Ala Ala Lys Arg Leu Ala Glu Cys Val Lys
 180 185 190

Gln Val Ile Thr Lys Glu Tyr Glu Leu Phe Glu Phe Arg Arg Thr Glu
 195 200 205

Val Pro Pro Leu Leu Leu Ile Leu Asp Arg Cys Asp Asp Ala Ile Thr
 210 215 220

Pro Leu Leu Asn Gln Trp Thr Tyr Gln Ala Met Val His Glu Leu Leu
 225 230 235 240

Gly Ile Asn Asn Asn Arg Ile Asp Leu Ser Arg Val Pro Gly Ile Ser
 245 250 255

Lys Asp Leu Arg Glu Val Val Leu Ser Ala Glu Asn Asp Glu Phe Tyr
 260 265 270

Ala Asn Asn Met Tyr Leu Asn Phe Ala Glu Ile Gly Ser Asn Ile Lys
 275 280 285

Asn Leu Met Glu Asp Phe Gln Lys Lys Lys Pro Lys Glu Gln Gln Lys
 290 295 300

Leu Glu Ser Ile Ala Asp Met Lys Ala Phe Val Glu Asn Tyr Pro Gln
 305 310 315 320

Phe Lys Lys Met Ser Gly Thr Val Ser Lys His Val Thr Val Val Gly
 325 330 335

Glu Leu Ser Arg Leu Val Ser Glu Arg Asn Leu Leu Glu Val Ser Glu
 340 345 350

Val Glu Gln Glu Leu Ala Cys Gln Asn Asp His Ser Ser Ala Leu Gln
 355 360 365

Asn Ile Lys Arg Leu Leu Gln Asn Pro Lys Val Thr Glu Phe Asp Ala
 370 375 380

Ala Arg Leu Val Met Leu Tyr Ala Leu His Tyr Glu Arg His Ser Ser
 385 390 395 400

Asn Ser Leu Pro Gly Leu Met Met Asp Leu Arg Asn Lys Gly Val Ser
 405 410 415

Glu Lys Tyr Arg Lys Leu Val Ser Ala Val Val Glu Tyr Gly Gly Lys
 420 425 430

Arg Val Arg Gly Ser Asp Leu Phe Ser Pro Lys Asp Ala Val Ala Ile
 435 440 445

Thr Lys Gln Phe Leu Lys Gly Leu Lys Gly Val Glu Asn Val Tyr Thr
 450 455 460

Gln His Gln Pro Phe Leu His Glu Thr Leu Asp His Leu Ile Lys Gly
 465 470 475 480

Arg Leu Lys Glu Asn Leu Tyr Pro Tyr Leu Gly Pro Ser Thr Leu Arg
 485 490 495

Asp Arg Pro Gln Asp Ile Ile Val Phe Val Ile Gly Gly Ala Thr Tyr
 500 505 510

Glu Glu Ala Leu Thr Val Tyr Asn Leu Asn Arg Thr Thr Pro Gly Val
 515 520 525

Arg Ile Val Leu Gly Gly Thr Thr Val His Asn Thr Lys Ser Phe Leu
 530 535 540

Glu Glu Val Leu Ala Ser Gly Leu His Ser Arg Ser Lys Glu Ser Ser
 545 550 555 560

Gln Val Thr Ser Arg Ser Ala Ser Arg Arg
 565 570

<210> 2613
 <211> 474
 <212> PRT
 <213> Homo sapiens

<400> 2613

Met Thr Ile Leu Thr Tyr Pro Phe Lys Asn Leu Pro Thr Ala Ser Lys
 1 5 10 15

Trp Ala Leu Arg Phe Ser Ile Arg Pro Leu Ser Cys Ser Ser Gln Leu
 20 25 30

Arg Ala Ala Pro Ala Val Gln Thr Lys Thr Lys Lys Thr Leu Ala Lys
 35 40 45

Pro Asn Ile Arg Asn Val Val Val Val Asp Gly Val Arg Thr Pro Phe
 50 55 60

Leu Leu Ser Gly Thr Ser Tyr Lys Asp Leu Met Pro His Asp Leu Ala
 65 70 75 80

Arg Ala Ala Leu Thr Gly Leu Leu His Arg Thr Ser Val Pro Lys Glu
 85 90 95

Val Val Asp Tyr Ile Ile Phe Gly Thr Val Ile Gln Glu Val Lys Thr
 100 105 110

Ser Asn Val Ala Arg Glu Ala Ala Leu Gly Ala Gly Phe Ser Asp Lys
 115 120 125

Thr Pro Ala His Thr Val Thr Met Ala Cys Ile Ser Ala Asn Gln Ala
 130 135 140

Met Thr Thr Gly Val Gly Leu Ile Ala Ser Gly Gln Cys Asp Val Ile
 145 150 155 160

Val Ala Gly Gly Val Glu Leu Met Ser Asp Val Pro Ile Arg His Ser
 165 170 175

Arg Lys Met Arg Lys Leu Met Leu Asp Leu Asn Lys Ala Lys Ser Met
 180 185 190

Gly Gln Arg Leu Ser Leu Ile Ser Lys Phe Arg Phe Asn Phe Leu Ala
 195 200 205

Pro Glu Leu Pro Ala Val Ser Glu Phe Ser Thr Ser Glu Thr Met Gly
 210 215 220

His Ser Ala Asp Arg Leu Ala Ala Ala Phe Ala Val Ser Arg Leu Glu
 225 230 235 240

Gln Asp Glu Tyr Ala Leu Arg Ser His Ser Leu Ala Lys Lys Ala Gln
 245 250 255

Asp Glu Gly Leu Leu Ser Asp Val Val Pro Phe Lys Val Pro Gly Lys
 260 265 270

Asp Thr Val Thr Lys Asp Asn Gly Ile Arg Pro Ser Ser Leu Glu Gln
 275 280 285

Met Ala Lys Leu Lys Pro Ala Phe Ile Lys Pro Tyr Gly Thr Val Thr
 290 295 300

Ala Ala Asn Ser Ser Phe Leu Thr Asp Gly Ala Ser Ala Met Leu Ile
 305 310 315 320

Met Ala Glu Glu Lys Ala Leu Ala Met Gly Tyr Lys Pro Lys Ala Tyr
 325 330 335

Leu Arg Asp Phe Met Tyr Val Ser Gln Asp Pro Lys Asp Gln Leu Leu
 340 345 350

Leu Gly Pro Thr Tyr Ala Thr Pro Lys Val Leu Glu Lys Ala Gly Leu
 355 360 365

Thr Met Asn Asp Ile Asp Ala Phe Glu Phe His Glu Ala Phe Ser Gly
370 375 380

Gln Ile Leu Ala Asn Phe Lys Ala Met Asp Ser Asp Trp Phe Ala Glu
385 390 395 400

Asn Tyr Met Gly Arg Lys Thr Lys Val Gly Leu Pro Pro Leu Glu Lys
405 410 415

Phe Asn Asn Trp Gly Gly Ser Leu Ser Leu Gly His Pro Phe Gly Ala
420 425 430

Thr Gly Cys Arg Leu Val Met Ala Ala Ala Asn Arg Leu Arg Lys Glu
435 440 445

Gly Gly Gln Tyr Gly Leu Val Ala Ala Cys Ala Ala Gly Gly Gln Gly
450 455 460

His Ala Met Ile Val Glu Ala Tyr Pro Lys
465 470

<210> 2614
<211> 793
<212> PRT
<213> Homo sapiens

<400> 2614

Met Glu Ser Arg Ala Glu Gly Gly Ser Pro Ala Val Phe Asp Trp Phe
1 5 10 15

Phe Glu Ala Ala Cys Pro Ala Ser Leu Gln Glu Asp Pro Pro Ile Leu
20 25 30

Arg Gln Phe Pro Pro Asp Phe Arg Asp Gln Glu Ala Met Gln Met Val
35 40 45

Pro Lys Phe Cys Phe Pro Phe Asp Val Glu Arg Glu Pro Pro Ser Pro
50 55 60

Ala Val Gln His Phe Thr Phe Ala Leu Thr Asp Leu Ala Gly Asn Arg
65 70 75 80

Arg Phe Gly Phe Cys Arg Leu Arg Ala Gly Thr Gln Ser Cys Leu Cys
85 90 95

Ile Leu Ser His Leu Pro Trp Phe Glu Val Phe Tyr Lys Leu Leu Asn

100					105					110					
Thr	Val	Gly	Asp	Leu	Leu	Ala	Gln	Asp	Gln	Val	Thr	Glu	Ala	Glu	Glu
		115					120					125			
Leu	Leu	Gln	Asn	Leu	Phe	Gln	Gln	Ser	Leu	Ser	Gly	Pro	Gln	Ala	Ser
		130					135					140			
Val	Gly	Leu	Glu	Leu	Gly	Ser	Gly	Val	Thr	Val	Ser	Ser	Gly	Gln	Gly
		145					150					155			
Ile	Pro	Pro	Pro	Thr	Arg	Gly	Asn	Ser	Lys	Pro	Leu	Ser	Cys	Phe	Val
				165					170					175	
Ala	Pro	Asp	Ser	Gly	Arg	Leu	Pro	Ser	Ile	Pro	Glu	Asn	Arg	Asn	Leu
			180						185					190	
Thr	Glu	Leu	Val	Val	Ala	Val	Thr	Asp	Glu	Asn	Ile	Val	Gly	Leu	Phe
			195						200					205	
Ala	Ala	Leu	Leu	Ala	Glu	Arg	Arg	Val	Leu	Leu	Thr	Ala	Ser	Lys	Leu
			210						215					220	
Ser	Thr	Leu	Thr	Ser	Cys	Val	His	Ala	Ser	Cys	Ala	Leu	Leu	Tyr	Pro
Met	Arg	Trp	Glu	His	Val	Leu	Ile	Pro	Thr	Leu	Pro	Pro	His	Leu	Leu
				245										255	
Asp	Tyr	Cys	Cys	Ala	Pro	Met	Pro	Tyr	Leu	Ile	Gly	Val	His	Ala	Ser
				260										270	
Leu	Ala	Glu	Arg	Val	Arg	Glu	Lys	Ala	Leu	Glu	Asp	Val	Val	Val	Leu
				275										285	
Asn	Val	Asp	Ala	Asn	Thr	Leu	Glu	Thr	Thr	Phe	Asn	Asp	Val	Gln	Ala
				290										300	
Leu	Pro	Pro	Asp	Val	Val	Ser	Leu	Leu	Arg	Leu	Arg	Leu	Arg	Lys	Val
Ala	Leu	Ala	Pro	Gly	Glu	Gly	Val	Ser	Arg	Leu	Phe	Leu	Lys	Ala	Gln
				325										335	
Ala	Leu	Leu	Phe	Gly	Gly	Tyr	Arg	Asp	Ala	Leu	Val	Cys	Ser	Pro	Gly
				340										350	

Gln Pro Val Thr Phe Ser Glu Glu Val Phe Leu Ala Gln Lys Pro Gly
 355 360 365

Ala Pro Leu Gln Ala Phe His Arg Arg Ala Val His Leu Gln Leu Phe
 370 375 380

Lys Gln Phe Ile Glu Ala Arg Leu Glu Lys Leu Asn Lys Gly Glu Gly
 385 390 395 400

Phe Ser Asp Gln Phe Glu Gln Glu Ile Thr Gly Cys Gly Ala Ser Pro
 405 410 415

Gly Ala Leu Arg Ser Tyr Gln Leu Trp Ala Asp Asn Leu Lys Lys Gly
 420 425 430

Gly Gly Ala Leu Leu His Ser Val Lys Ala Lys Thr Gln Pro Ala Val
 435 440 445

Lys Asn Met Tyr Arg Ser Ala Lys Ser Gly Leu Lys Gly Val Gln Ser
 450 455 460

Leu Leu Met Tyr Lys Asp Gly Asp Ser Val Leu Gln Arg Gly Gly Ser
 465 470 475 480

Leu Arg Ala Pro Ala Leu Pro Ser Arg Ser Asp Arg Leu Gln Gln Arg
 485 490 495

Leu Pro Ile Thr Gln His Phe Gly Lys Asn Arg Pro Leu Arg Pro Ser
 500 505 510

Arg Arg Arg Gln Leu Glu Glu Gly Thr Ser Glu Pro Pro Gly Ala Gly
 515 520 525

Thr Pro Pro Leu Ser Pro Glu Asp Glu Gly Cys Pro Trp Ala Glu Glu
 530 535 540

Ala Leu Asp Ser Ser Phe Leu Gly Ser Gly Glu Glu Leu Asp Leu Leu
 545 550 555 560

Ser Glu Ile Leu Asp Ser Leu Ser Met Gly Ala Lys Ser Ala Gly Ser
 565 570 575

Leu Arg Pro Ser Gln Ser Leu Asp Cys Cys His Arg Gly Asp Leu Asp
 580 585 590

Ser Cys Phe Ser Leu Pro Asn Ile Leu Arg Trp Gln Pro Asp Asp Lys
 595 600 605

Lys Leu Pro Glu Pro Glu Pro Gln Pro Leu Ser Leu Pro Ser Leu Gln
 610 615 620

Asn Ala Ser Ser Leu Asp Ala Thr Ser Ser Ser Lys Asp Ser Arg Ser
 625 630 635 640

Gln Leu Ile Pro Ser Glu Ser Asp Gln Glu Val Thr Ser Pro Ser Gln
 645 650 655

Ser Ser Thr Ala Ser Ala Asp Pro Ser Ile Trp Gly Asp Pro Lys Pro
 660 665 670

Ser Pro Leu Thr Glu Pro Leu Ile Leu His Leu Thr Pro Ser His Lys
 675 680 685

Ala Ala Glu Asp Phe Thr Ala Gln Glu Asn Pro Thr Pro Trp Leu Ser
 690 695 700

Thr Ala Pro Thr Glu Pro Ser Pro Pro Glu Ser Pro Gln Ile Leu Ala
 705 710 715 720

Pro Thr Lys Pro Asn Phe Asp Ile Ala Trp Thr Ser Gln Pro Leu Asp
 725 730 735

Pro Ser Ser Asp Pro Ser Ser Leu Glu Asp Pro Arg Ala Arg Pro Pro
 740 745 750

Lys Ala Leu Leu Ala Glu Arg Ala His Leu Gln Pro Arg Glu Glu Pro
 755 760 765

Gly Ala Leu Asn Ser Pro Ala Thr Pro Thr Ser Asn Cys Gln Lys Ser
 770 775 780

Gln Pro Ser Lys Pro Ala Gln Ser Arg
 785 790

<210> 2615
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 2615

Met Ser Phe Phe Gln Leu Leu Met Lys Arg Lys Glu Leu Ile Pro Leu

Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly
 130 135 140

Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Trp Phe Gly Gln Gly
 145 150 155 160

Ser Gly Pro Ile Ala Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser
 165 170 175

Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly
 180 185 190

His Gly Glu Asp Ala Gly Val Ile Cys Ser Ala Ala Gln Pro Gln Ser
 195 200 205

Thr Leu Arg Pro Glu Ser Trp Pro Val Arg Ile Ser Pro Pro Val Pro
 210 215 220

Thr Glu Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
 225 230 235 240

Asp Arg Cys Arg Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly
 245 250 255

Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys
 260 265 270

Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln
 275 280 285

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
 290 295 300

Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Thr
 305 310 315 320

His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Pro
 325 330 335

Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala
 340 345 350

Ser Thr Ala Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly
 355 360 365

Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp
 370 375 380

Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala Asn Val Val
 385 390 395 400

Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro Gly Asn Ala
 405 410 415

Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys
 420 425 430

Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu
 435 440 445

Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala
 450 455 460

Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro Thr Ile Thr
 465 470 475 480

Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu
 485 490 495

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
 500 505 510

Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala
 515 520 525

Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Leu Ala Pro
 530 535 540

Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
 545 550 555 560

Val Arg Cys Ser Gly Asn Glu Ser Tyr Leu Trp Ser Cys Pro His Asn
 565 570 575

Gly Trp Leu Ser His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile
 580 585 590

Cys Ser Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
 595 600 605

Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly

610

615

620

Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys
 625 630 635 640

Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Arg
 645 650 655

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
 660 665 670

Gly His Glu Ser Tyr Leu Trp Ser Cys Pro Asn Asn Gly Trp Leu Ser
 675 680 685

His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala Ala
 690 695 700

Gln Ser Arg Ser Thr Pro Arg Pro Asp Thr Leu Ser Thr Ile Thr Leu
 705 710 715 720

Pro Pro Ser Thr Val Gly Ser Glu Ser Ser Leu Thr Leu Arg Leu Val
 725 730 735

Asn Gly Ser Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly
 740 745 750

Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala Asn
 755 760 765

Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly
 770 775 780

Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val
 785 790 795 800

Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly
 805 810 815

Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys
 820 825 830

Ser Val Ser Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr
 835 840 845

Ser His Ala Ser Thr Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu
 850 855 860

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
 865 870 875 880

Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala
 885 890 895

Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro
 900 905 910

Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
 915 920 925

Val Arg Cys Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn
 930 935 940

Gly Trp Leu Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile
 945 950 955 960

Cys Ser Ala Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro
 965 970 975

Thr Ile Thr Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala
 980 985 990

Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val
 995 1000 1005

Leu Tyr Gln Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp
 1010 1015 1020

Thr Asn Asp Ala Asn Val Val Cys Arg Gln Pro Gly Cys Gly Trp
 1025 1030 1035

Ala Met Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly
 1040 1045 1050

Pro Ile Val Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr
 1055 1060 1065

Pro Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly
 1070 1075 1080

His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Ser Gln Ser Arg
 1085 1090 1095

Pro Thr 1100	Pro Ser	Pro Asp	Thr 1105	Trp	Pro Thr	Ser	His 1110	Ala Ser	Thr
Ala Gly 1115	Ser Glu	Ser Ser	Leu 1120	Ala Leu	Arg Leu	Val 1125	Asn Gly	Gly	
Asp Arg 1130	Cys Gln	Gly Arg	Val 1135	Glu Val	Leu Tyr	Arg 1140	Gly Ser	Trp	
Gly Thr 1145	Val Cys	Asp Asp	Tyr 1150	Trp Asp	Thr Asn	Asp 1155	Ala Asn	Val	
Val Cys 1160	Arg Gln	Leu Gly	Cys 1165	Gly Trp	Ala Met	Ser 1170	Ala Pro	Gly	
Asn Ala 1175	Arg Phe	Gly Gln	Gly 1180	Ser Gly	Pro Ile	Val 1185	Leu Asp	Asp	
Val Arg 1190	Cys Ser	Gly His	Glu 1195	Ser Tyr	Leu Trp	Ser 1200	Cys Pro	His	
Asn Gly 1205	Trp Leu	Ser His	Asn 1210	Cys Gly	His His	Glu 1215	Asp Ala	Gly	
Val Ile 1220	Cys Ser	Ala Ser	Gln 1225	Ser Gln	Pro Thr	Pro 1230	Ser Pro	Asp	
Thr Trp 1235	Pro Thr	Ser His	Ala 1240	Ser Thr	Ala Gly	Ser 1245	Glu Ser	Ser	
Leu Ala 1250	Leu Arg	Leu Val	Asn 1255	Gly Gly	Asp Arg	Cys 1260	Gln Gly	Arg	
Val Glu 1265	Val Leu	Tyr Arg	Gly 1270	Ser Trp	Gly Thr	Val 1275	Cys Asp	Asp	
Tyr Trp 1280	Asp Thr	Asn Asp	Ala 1285	Asn Val	Val Cys	Arg 1290	Gln Leu	Gly	
Cys Gly 1295	Trp Ala	Thr Ser	Ala 1300	Pro Gly	Asn Ala	Arg 1305	Phe Gly	Gln	
Gly Ser 1310	Gly Pro	Ile Val	Leu 1315	Asp Asp	Val Arg	Cys 1320	Ser Gly	His	

Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His
 1325 1330 1335
 Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala Ser
 1340 1345 1350
 Gln Ser Gln Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His
 1355 1360 1365
 Ala Ser Thr Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val
 1370 1375 1380
 Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
 1385 1390 1395
 Gly Ser Trp Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp
 1400 1405 1410
 Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser
 1415 1420 1425
 Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val
 1430 1435 1440
 Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser
 1445 1450 1455
 Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu
 1460 1465 1470
 Asp Ala Gly Val Ile Cys Ser Ala Ser Gln Ser Gln Pro Thr Pro
 1475 1480 1485
 Ser Pro Asp Thr Trp Pro Thr Ser Arg Ala Ser Thr Ala Gly Ser
 1490 1495 1500
 Glu Ser Thr Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys
 1505 1510 1515
 Arg Gly Arg Val Glu Val Leu Tyr Gln Gly Ser Trp Gly Thr Val
 1520 1525 1530
 Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg
 1535 1540 1545
 Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln

1550	1555	1560
Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys		
1565	1570	1575
Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp		
1580	1585	1590
Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys		
1595	1600	1605
Ser Ala Ala Gln Ser Gln Ser Thr Pro Arg Pro Asp Thr Trp Leu		
1610	1615	1620
Thr Thr Asn Leu Pro Ala Leu Thr Val Gly Ser Glu Ser Ser Leu		
1625	1630	1635
Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Arg Gly Arg Val		
1640	1645	1650
Glu Val Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp Asp Ser		
1655	1660	1665
Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly Cys		
1670	1675	1680
Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly		
1685	1690	1695
Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser Gly Asn Glu		
1700	1705	1710
Ser Tyr Leu Trp Ser Cys Pro His Lys Gly Trp Leu Thr His Asn		
1715	1720	1725
Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala Thr Gln		
1730	1735	1740
Ile Asn Ser Thr Thr Thr Asp Trp Trp His Pro Thr Thr Thr Thr		
1745	1750	1755
Thr Ala Arg Pro Ser Ser Asn Cys Gly Gly Phe Leu Phe Tyr Ala		
1760	1765	1770
Ser Gly Thr Phe Ser Ser Pro Ser Tyr Pro Ala Tyr Tyr Pro Asn		
1775	1780	1785

Asn Ala Lys Cys Val Trp Glu Ile Glu Val Asn Ser Gly Tyr Arg
 1790 1795 1800

Ile Asn Leu Gly Phe Ser Asn Leu Lys Leu Glu Ala His His Asn
 1805 1810 1815

Cys Ser Phe Asp Tyr Val Glu Ile Phe Asp Gly Ser Leu Asn Ser
 1820 1825 1830

Ser Leu Leu Leu Gly Lys Ile Cys Asn Asp Thr Arg Gln Ile Phe
 1835 1840 1845

Thr Ser Ser Tyr Asn Arg Met Thr Ile His Phe Arg Ser Asp Ile
 1850 1855 1860

Ser Phe Gln Asn Thr Gly Phe Leu Ala Trp Tyr Asn Ser Phe Pro
 1865 1870 1875

Ser Asp Ala Thr Leu Arg Leu Val Asn Leu Asn Ser Ser Tyr Gly
 1880 1885 1890

Leu Cys Ala Gly Arg Val Glu Ile Tyr His Gly Gly Thr Trp Gly
 1895 1900 1905

Thr Val Cys Asp Asp Ser Trp Thr Ile Gln Glu Ala Glu Val Val
 1910 1915 1920

Cys Arg Gln Leu Gly Cys Gly Arg Ala Val Ser Ala Leu Gly Asn
 1925 1930 1935

Ala Tyr Phe Gly Ser Gly Ser Gly Pro Ile Thr Leu Asp Asp Val
 1940 1945 1950

Glu Cys Ser Gly Thr Glu Ser Thr Leu Trp Gln Cys Arg Asn Arg
 1955 1960 1965

Gly Trp Phe Ser His Asn Cys Asn His Arg Glu Asp Ala Gly Val
 1970 1975 1980

Ile Cys Ser Gly Asn His Leu Ser Thr Pro Ala Pro Phe Leu Asn
 1985 1990 1995

Ile Thr Arg Pro Asn Thr Asp Tyr Ser Cys Gly Gly Phe Leu Ser
 2000 2005 2010

Gln	Pro	Ser	Gly	Asp	Phe	Ser	Ser	Pro	Phe	Tyr	Pro	Gly	Asn	Tyr
2015						2020					2025			
Pro	Asn	Asn	Ala	Lys	Cys	Val	Trp	Asp	Ile	Glu	Val	Gln	Asn	Asn
2030						2035					2040			
Tyr	Arg	Val	Thr	Val	Ile	Phe	Arg	Asp	Val	Gln	Leu	Glu	Gly	Gly
2045						2050					2055			
Cys	Asn	Tyr	Asp	Tyr	Ile	Glu	Val	Phe	Asp	Gly	Pro	Tyr	Arg	Ser
2060						2065					2070			
Ser	Pro	Leu	Ile	Ala	Arg	Val	Cys	Asp	Gly	Ala	Arg	Gly	Ser	Phe
2075						2080					2085			
Thr	Ser	Ser	Ser	Asn	Phe	Met	Ser	Ile	Arg	Phe	Ile	Ser	Asp	His
2090						2095					2100			
Ser	Ile	Thr	Arg	Arg	Gly	Phe	Arg	Ala	Glu	Tyr	Tyr	Ser	Ser	Pro
2105						2110					2115			
Ser	Asn	Asp	Ser	Thr	Asn	Leu	Leu	Cys	Leu	Pro	Asn	His	Met	Gln
2120						2125					2130			
Ala	Ser	Val	Ser	Arg	Ser	Tyr	Leu	Gln	Ser	Leu	Gly	Phe	Ser	Ala
2135						2140					2145			
Ser	Asp	Leu	Val	Ile	Ser	Thr	Trp	Asn	Gly	Tyr	Tyr	Glu	Cys	Arg
2150						2155					2160			
Pro	Gln	Ile	Thr	Pro	Asn	Leu	Val	Ile	Phe	Thr	Ile	Pro	Tyr	Ser
2165						2170					2175			
Gly	Cys	Gly	Thr	Phe	Lys	Gln	Ala	Asp	Asn	Asp	Thr	Ile	Asp	Tyr
2180						2185					2190			
Ser	Asn	Phe	Leu	Thr	Ala	Ala	Val	Ser	Gly	Gly	Ile	Ile	Lys	Arg
2195						2200					2205			
Arg	Thr	Asp	Leu	Arg	Ile	His	Val	Ser	Cys	Arg	Met	Leu	Gln	Asn
2210						2215					2220			
Thr	Trp	Val	Asp	Thr	Met	Tyr	Ile	Ala	Asn	Asp	Thr	Ile	His	Val
2225						2230					2235			

Ala Asn Asn Thr Ile Gln Val Glu Glu Val Gln Tyr Gly Asn Phe
 2240 2245 2250

Asp Val Asn Ile Ser Phe Tyr Thr Ser Ser Ser Phe Leu Tyr Pro
 2255 2260 2265

Val Thr Ser Arg Pro Tyr Tyr Val Asp Leu Asn Gln Asp Leu Tyr
 2270 2275 2280

Val Gln Ala Glu Ile Leu His Ser Asp Ala Val Leu Thr Leu Phe
 2285 2290 2295

Val Asp Thr Cys Val Ala Ser Pro Tyr Ser Asn Asp Phe Thr Ser
 2300 2305 2310

Leu Thr Tyr Asp Leu Ile Arg Ser Gly Cys Val Arg Asp Asp Thr
 2315 2320 2325

Tyr Gly Pro Tyr Ser Ser Pro Ser Leu Arg Ile Ala Arg Phe Arg
 2330 2335 2340

Phe Arg Ala Phe His Phe Leu Asn Arg Phe Pro Ser Val Tyr Leu
 2345 2350 2355

Arg Cys Lys Met Val Val Cys Arg Ala Tyr Asp Pro Ser Ser Arg
 2360 2365 2370

Cys Tyr Arg Gly Cys Val Leu Arg Ser Lys Arg Asp Val Gly Ser
 2375 2380 2385

Tyr Gln Glu Lys Val Asp Val Val Leu Gly Pro Ile Gln Leu Gln
 2390 2395 2400

Thr Pro Pro Arg Arg Glu Glu Glu Pro Arg
 2405 2410

<210> 2617

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2617

Met Gly Lys Cys Arg Gly Leu Arg Thr Ala Arg Lys Leu Arg Ser His
 1 5 10 15

Arg Arg Asp Gln Lys Trp His Asp Lys Gln Tyr Lys Lys Ala His Leu
 20 25 30

Gly Thr Ala Leu Lys Ala Asn Pro Phe Gly Gly Ala Ser His Ala Lys
 35 40 45

Gly Ile Val Leu Glu Lys Val Gly Val Glu Ala Lys Gln Pro Asn Ser
 50 55 60

Ala Ile Arg Lys Cys Val Arg Val Gln Leu Ile Lys Asn Gly Lys Lys
 65 70 75 80

Ile Thr Ala Phe Val Pro Asn Asp Gly Cys Leu Asn Phe Ile Glu Glu
 85 90 95

Asn Asp Glu Val Leu Val Ala Gly Phe Gly Arg Lys Gly His Ala Val
 100 105 110

Gly Asp Ile Pro Gly Val Arg Phe Lys Val Val Lys Val Ala Asn Val
 115 120 125

Ser Leu Leu Ala Leu Tyr Lys Gly Lys Lys Glu Arg Pro Arg Ser
 130 135 140

<210> 2618
 <211> 272
 <212> PRT
 <213> Homo sapiens

<400> 2618

Met Glu Glu Glu Ala Ile Ala Ser Leu Pro Gly Glu Glu Thr Glu Asp
 1 5 10 15

Met Asp Phe Leu Ser Gly Leu Glu Leu Ala Asp Leu Leu Asp Pro Arg
 20 25 30

Gln Pro Asp Trp His Leu Asp Pro Gly Leu Ser Ser Pro Gly Pro Leu
 35 40 45

Ser Ser Ser Gly Gly Gly Ser Asp Ser Gly Gly Leu Trp Arg Gly Asp
 50 55 60

Asp Asp Asp Glu Ala Ala Ala Ala Glu Met Gln Arg Phe Ser Asp Leu
 65 70 75 80

Leu Gln Arg Leu Leu Asn Gly Ile Gly Gly Cys Ser Ser Ser Ser Asp
 85 90 95

Ser Gly Ser Ala Glu Lys Arg Arg Arg Lys Ser Pro Gly Gly Gly Gly
 100 105 110

Gly Gly Gly Ser Gly Asn Asp Asn Asn Gln Ala Ala Thr Lys Ser Pro
 115 120 125

Arg Lys Ala Ala Ala Ala Ala Ala Arg Leu Asn Arg Leu Lys Lys Lys
 130 135 140

Glu Tyr Val Met Gly Leu Glu Ser Arg Val Arg Gly Leu Ala Ala Glu
 145 150 155 160

Asn Gln Glu Leu Arg Ala Glu Asn Arg Glu Leu Gly Lys Arg Val Gln
 165 170 175

Ala Leu Gln Glu Glu Ser Arg Tyr Leu Arg Ala Val Leu Ala Asn Glu
 180 185 190

Thr Gly Leu Ala Arg Leu Leu Ser Arg Leu Ser Gly Val Gly Leu Arg
 195 200 205

Leu Thr Thr Ser Leu Phe Arg Asp Ser Pro Ala Gly Asp His Asp Tyr
 210 215 220

Ala Leu Pro Val Gly Lys Gln Lys Gln Asp Leu Leu Glu Glu Asp Asp
 225 230 235 240

Ser Ala Gly Gly Val Cys Leu His Val Asp Lys Asp Lys Val Ser Val
 245 250 255

Glu Phe Cys Ser Ala Cys Ala Arg Lys Ala Ser Ser Ser Leu Lys Met
 260 265 270

<210> 2619
 <211> 694
 <212> PRT
 <213> Homo sapiens

<400> 2619

Met Lys His Leu Lys Arg Trp Trp Ser Ala Gly Gly Gly Leu Leu His
 1 5 10 15

Leu Thr Leu Leu Leu Ser Leu Ala Gly Leu Arg Val Asp Leu Asp Leu
 20 25 30

Tyr Leu Leu Leu Pro Pro Pro Thr Leu Leu Gln Asp Glu Leu Leu Phe
 35 40 45

Leu Gly Gly Pro Ala Ser Ser Ala Tyr Ala Leu Ser Pro Phe Ser Ala
 50 55 60

Ser Gly Gly Trp Gly Arg Ala Gly His Leu His Pro Lys Gly Arg Glu
 65 70 75 80

Leu Asp Pro Ala Ala Pro Pro Glu Gly Gln Leu Leu Arg Glu Val Arg
 85 90 95

Ala Leu Gly Val Pro Phe Val Pro Arg Thr Ser Val Asp Ala Trp Leu
 100 105 110

Val His Ser Val Ala Ala Gly Ser Ala Asp Glu Ala His Gly Leu Leu
 115 120 125

Gly Ala Ala Ala Ala Ser Ser Thr Gly Gly Ala Gly Ala Ser Val Asp
 130 135 140

Gly Gly Ser Gln Ala Val Gln Gly Gly Gly Gly Asp Pro Arg Ala Ala
 145 150 155 160

Arg Ser Gly Pro Leu Asp Ala Gly Glu Glu Glu Lys Ala Pro Ala Glu
 165 170 175

Pro Thr Ala Gln Val Pro Asp Ala Gly Gly Cys Ala Ser Glu Glu Asn
 180 185 190

Gly Val Leu Arg Glu Lys His Glu Ala Val Asp His Ser Ser Gln His
 195 200 205

Glu Glu Asn Glu Glu Arg Val Ser Ala Gln Lys Glu Asn Ser Leu Gln
 210 215 220

Gln Asn Asp Asp Asp Glu Asn Lys Ile Ala Glu Lys Pro Asp Trp Glu
 225 230 235 240

Ala Glu Lys Thr Thr Glu Ser Arg Asn Glu Arg His Leu Asn Gly Thr
 245 250 255

Asp Thr Ser Phe Ser Leu Glu Asp Leu Phe Gln Leu Leu Ser Ser Gln
 260 265 270

Pro Glu Asn Ser Leu Glu Gly Ile Ser Leu Gly Asp Ile Pro Leu Pro
 275 280 285

Gly Ser Ile Ser Asp Gly Met Asn Ser Ser Ala His Tyr His Val Asn
 290 295 300
 Phe Ser Gln Ala Ile Ser Gln Asp Val Asn Leu His Glu Ala Ile Leu
 305 310 315 320
 Leu Cys Pro Asn Asn Thr Phe Arg Arg Asp Pro Thr Ala Arg Thr Ser
 325 330 335
 Gln Ser Gln Glu Pro Phe Leu Gln Leu Asn Ser His Thr Thr Asn Pro
 340 345 350
 Glu Gln Thr Leu Pro Gly Thr Asn Leu Thr Gly Phe Leu Ser Pro Val
 355 360 365
 Asp Asn His Met Arg Asn Leu Thr Ser Gln Asp Leu Leu Tyr Asp Leu
 370 375 380
 Asp Ile Asn Ile Phe Asp Glu Ile Asn Leu Met Ser Leu Ala Thr Glu
 385 390 395 400
 Asp Asn Phe Asp Pro Ile Asp Val Ser Gln Leu Phe Asp Glu Pro Asp
 405 410 415
 Ser Asp Ser Gly Leu Ser Leu Asp Ser Ser His Asn Asn Thr Ser Val
 420 425 430
 Ile Lys Ser Asn Ser Ser His Ser Val Cys Asp Glu Gly Ala Ile Gly
 435 440 445
 Tyr Cys Thr Asp His Glu Ser Ser Ser His His Asp Leu Glu Gly Ala
 450 455 460
 Val Gly Gly Tyr Tyr Pro Glu Pro Ser Lys Leu Cys His Leu Asp Gln
 465 470 475 480
 Ser Asp Ser Asp Phe His Gly Asp Leu Thr Phe Gln His Val Phe His
 485 490 495
 Asn His Thr Tyr His Leu Gln Pro Thr Ala Pro Glu Ser Thr Ser Glu
 500 505 510
 Pro Phe Pro Trp Pro Gly Lys Ser Gln Lys Ile Arg Ser Arg Tyr Leu
 515 520 525

Glu Asp Thr Asp Arg Asn Leu Ser Arg Asp Glu Gln Arg Ala Lys Ala
 530 535 540

Leu His Ile Pro Phe Ser Val Asp Glu Ile Val Gly Met Pro Val Asp
 545 550 555 560

Ser Phe Asn Ser Met Leu Ser Arg Tyr Tyr Leu Thr Asp Leu Gln Val
 565 570 575

Ser Leu Ile Arg Asp Ile Arg Arg Arg Gly Lys Asn Lys Val Ala Ala
 580 585 590

Gln Asn Cys Arg Lys Arg Lys Leu Asp Ile Ile Leu Asn Leu Glu Asp
 595 600 605

Asp Val Cys Asn Leu Gln Ala Lys Lys Glu Thr Leu Lys Arg Glu Gln
 610 615 620

Ala Gln Cys Asn Lys Ala Ile Asn Ile Met Lys Gln Lys Leu His Asp
 625 630 635 640

Leu Tyr His Asp Ile Phe Ser Arg Leu Arg Asp Asp Gln Gly Arg Pro
 645 650 655

Val Asn Pro Asn His Tyr Ala Leu Gln Cys Thr His Asp Gly Ser Ile
 660 665 670

Leu Ile Val Pro Lys Glu Leu Val Ala Ser Gly His Lys Lys Glu Thr
 675 680 685

Gln Lys Gly Lys Arg Lys
 690

<210> 2620
 <211> 391
 <212> PRT
 <213> Homo sapiens

<400> 2620

Met Lys Cys Leu Val Thr Gly Gly Asn Val Lys Val Leu Gly Lys Ala
 1 5 10 15

Val His Ser Leu Ser Arg Ile Gly Asp Glu Leu Tyr Leu Glu Pro Leu
 20 25 30

Glu Asp Gly Leu Ser Leu Arg Thr Val Asn Ser Ser Arg Ser Ala Tyr
 35 40 45

Ala Cys Phe Leu Phe Ala Pro Leu Phe Phe Gln Gln Tyr Gln Ala Ala
 50 55 60

Thr Pro Gly Gln Asp Leu Leu Arg Cys Lys Ile Leu Met Lys Ser Phe
 65 70 75 80

Leu Ser Val Phe Arg Ser Leu Ala Met Leu Glu Lys Thr Val Glu Lys
 85 90 95

Cys Cys Ile Ser Leu Asn Gly Arg Ser Ser Arg Leu Val Val Gln Leu
 100 105 110

His Cys Lys Phe Gly Val Arg Lys Thr His Asn Leu Ser Phe Gln Asp
 115 120 125

Cys Glu Ser Leu Gln Ala Val Phe Asp Pro Ala Ser Cys Pro His Met
 130 135 140

Leu Arg Ala Pro Ala Arg Val Leu Gly Glu Ala Val Leu Pro Phe Ser
 145 150 155 160

Pro Ala Leu Ala Glu Val Thr Leu Gly Ile Gly Arg Gly Arg Arg Val
 165 170 175

Ile Leu Arg Ser Tyr His Glu Glu Glu Ala Asp Ser Thr Ala Lys Ala
 180 185 190

Met Val Thr Glu Met Cys Leu Gly Glu Glu Asp Phe Gln Gln Leu Gln
 195 200 205

Ala Gln Glu Gly Val Ala Ile Thr Phe Cys Leu Lys Glu Phe Arg Gly
 210 215 220

Leu Leu Ser Phe Ala Glu Ser Ala Asn Leu Asn Leu Ser Ile His Phe
 225 230 235 240

Asp Ala Pro Gly Arg Pro Ala Ile Phe Thr Ile Lys Asp Ser Leu Leu
 245 250 255

Asp Gly His Phe Val Leu Ala Thr Leu Ser Asp Thr Asp Ser His Ser
 260 265 270

Gln Asp Leu Gly Ser Pro Glu Arg His Gln Pro Val Pro Gln Leu Gln
 275 280 285

Ala His Ser Thr Pro His Pro Asp Asp Phe Ala Asn Asp Asp Ile Asp
 290 295 300

Ser Tyr Met Ile Ala Met Glu Thr Thr Ile Gly Asn Glu Gly Ser Arg
 305 310 315 320

Val Leu Pro Ser Ile Ser Leu Ser Pro Gly Pro Gln Pro Pro Lys Ser
 325 330 335

Pro Gly Pro His Ser Glu Glu Glu Asp Glu Ala Glu Pro Ser Thr Val
 340 345 350

Pro Gly Thr Pro Pro Pro Lys Lys Phe Arg Ser Leu Phe Phe Gly Ser
 355 360 365

Ile Leu Ala Pro Val Arg Ser Pro Gln Gly Pro Ser Pro Val Leu Ala
 370 375 380

Glu Asp Ser Glu Gly Glu Gly
 385 390

<210> 2621
 <211> 1429
 <212> PRT
 <213> Homo sapiens

<400> 2621

Met Ala Gly Gly Ala Trp Gly Arg Leu Ala Cys Tyr Leu Glu Phe Leu
 1 5 10 15

Lys Lys Glu Glu Leu Lys Glu Phe Gln Leu Leu Leu Ala Asn Lys Ala
 20 25 30

His Ser Arg Ser Ser Ser Gly Glu Thr Pro Ala Gln Pro Glu Lys Thr
 35 40 45

Ser Gly Met Glu Val Ala Ser Tyr Leu Val Ala Gln Tyr Gly Glu Gln
 50 55 60

Arg Ala Trp Asp Leu Ala Leu His Thr Trp Glu Gln Met Gly Leu Arg
 65 70 75 80

Ser Leu Cys Ala Gln Ala Gln Glu Gly Ala Gly His Ser Pro Ser Phe
 85 90 95

Pro Tyr Ser Pro Ser Glu Pro His Leu Gly Ser Pro Ser Gln Pro Thr

100

105

110

Ser Thr Ala Val Leu Met Pro Trp Ile His Glu Leu Pro Ala Gly Cys
 115 120 125

Thr Gln Gly Ser Glu Arg Arg Val Leu Arg Gln Leu Pro Asp Thr Ser
 130 135 140

Gly Arg Arg Trp Arg Glu Ile Ser Ala Ser Leu Leu Tyr Gln Ala Leu
 145 150 155 160

Pro Ser Ser Pro Asp His Glu Ser Pro Ser Gln Glu Ser Pro Asn Ala
 165 170 175

Pro Thr Ser Thr Ala Val Leu Gly Ser Trp Gly Ser Pro Pro Gln Pro
 180 185 190

Ser Leu Ala Pro Arg Glu Gln Glu Ala Pro Gly Thr Gln Trp Pro Leu
 195 200 205

Asp Glu Thr Ser Gly Ile Tyr Tyr Thr Glu Ile Arg Glu Arg Glu Arg
 210 215 220

Glu Lys Ser Glu Lys Gly Arg Pro Pro Trp Ala Ala Val Val Gly Thr
 225 230 235 240

Pro Pro Gln Ala His Thr Ser Leu Gln Pro His His His Pro Trp Glu
 245 250 255

Pro Ser Val Arg Glu Ser Leu Cys Ser Thr Trp Pro Trp Lys Asn Glu
 260 265 270

Asp Phe Asn Gln Lys Phe Thr Gln Leu Leu Leu Leu Gln Arg Pro His
 275 280 285

Pro Arg Ser Gln Asp Pro Leu Val Lys Arg Ser Trp Pro Asp Tyr Val
 290 295 300

Glu Glu Asn Arg Gly His Leu Ile Glu Ile Arg Asp Leu Phe Gly Pro
 305 310 315 320

Gly Leu Asp Thr Gln Glu Pro Arg Ile Val Ile Leu Gln Gly Ala Ala
 325 330 335

Gly Ile Gly Lys Ser Thr Leu Ala Arg Gln Val Lys Glu Ala Trp Gly
 340 345 350

Arg Gly Gln Leu Tyr Gly Asp Arg Phe Gln His Val Phe Tyr Phe Ser
 355 360 365

Cys Arg Glu Leu Ala Gln Ser Lys Val Val Ser Leu Ala Glu Leu Ile
 370 375 380

Gly Lys Asp Gly Thr Ala Thr Pro Ala Pro Ile Arg Gln Ile Leu Ser
 385 390 395 400

Arg Pro Glu Arg Leu Leu Phe Ile Leu Asp Gly Val Asp Glu Pro Gly
 405 410 415

Trp Val Leu Gln Glu Pro Ser Ser Glu Leu Cys Leu His Trp Ser Gln
 420 425 430

Pro Gln Pro Ala Asp Ala Leu Leu Gly Ser Leu Leu Gly Lys Thr Ile
 435 440 445

Leu Pro Glu Ala Ser Phe Leu Ile Thr Ala Arg Thr Thr Ala Leu Gln
 450 455 460

Asn Leu Ile Pro Ser Leu Glu Gln Ala Arg Trp Val Glu Val Leu Gly
 465 470 475 480

Phe Ser Glu Ser Ser Arg Lys Glu Tyr Phe Tyr Arg Tyr Phe Thr Asp
 485 490 495

Glu Arg Gln Ala Ile Arg Ala Phe Arg Leu Val Lys Ser Asn Lys Glu
 500 505 510

Leu Trp Ala Leu Cys Leu Val Pro Trp Val Ser Trp Leu Ala Cys Thr
 515 520 525

Cys Leu Met Gln Gln Met Lys Arg Lys Glu Lys Leu Thr Leu Thr Ser
 530 535 540

Lys Thr Thr Thr Thr Leu Cys Leu His Tyr Leu Ala Gln Ala Leu Gln
 545 550 555 560

Ala Gln Pro Leu Gly Pro Gln Leu Arg Asp Leu Cys Ser Leu Ala Ala
 565 570 575

Glu Gly Ile Trp Gln Lys Lys Thr Leu Phe Ser Pro Asp Asp Leu Arg
 580 585 590

Lys His Gly Leu Asp Gly Ala Ile Ile Ser Thr Phe Leu Lys Met Gly
 595 600 605

Ile Leu Gln Glu His Pro Ile Pro Leu Ser Tyr Ser Phe Ile His Leu
 610 615 620

Cys Phe Gln Glu Phe Phe Ala Ala Met Ser Tyr Val Leu Glu Asp Glu
 625 630 635 640

Lys Gly Arg Gly Lys His Ser Asn Cys Ile Ile Asp Leu Glu Lys Thr
 645 650 655

Leu Glu Ala Tyr Gly Ile His Gly Leu Phe Gly Ala Ser Thr Thr Arg
 660 665 670

Phe Leu Leu Gly Leu Leu Ser Asp Glu Gly Glu Arg Glu Met Glu Asn
 675 680 685

Ile Phe His Cys Arg Leu Ser Gln Gly Arg Asn Leu Met Gln Trp Val
 690 695 700

Pro Ser Leu Gln Leu Leu Leu Gln Pro His Ser Leu Glu Ser Leu His
 705 710 715 720

Cys Leu Tyr Glu Thr Arg Asn Lys Thr Phe Leu Thr Gln Val Met Ala
 725 730 735

His Phe Glu Glu Met Gly Met Cys Val Glu Thr Asp Met Glu Leu Leu
 740 745 750

Val Cys Thr Phe Cys Ile Lys Phe Ser Arg His Val Lys Lys Leu Gln
 755 760 765

Leu Ile Glu Gly Arg Gln His Arg Ser Thr Trp Ser Pro Thr Met Val
 770 775 780

Val Leu Phe Arg Trp Val Pro Val Thr Asp Ala Tyr Trp Gln Ile Leu
 785 790 795 800

Phe Ser Val Leu Lys Val Thr Arg Asn Leu Lys Glu Leu Asp Leu Ser
 805 810 815

Gly Asn Ser Leu Ser His Ser Ala Val Lys Ser Leu Cys Lys Thr Leu
 820 825 830

Arg Arg Pro Arg Cys Leu Leu Glu Thr Leu Arg Leu Ala Gly Cys Gly
 835 840 845

Leu Thr Ala Glu Asp Cys Lys Asp Leu Ala Phe Gly Leu Arg Ala Asn
 850 855 860

Gln Thr Leu Thr Glu Leu Asp Leu Ser Phe Asn Val Leu Thr Asp Ala
 865 870 875 880

Gly Ala Lys His Leu Cys Gln Arg Leu Arg Gln Pro Ser Cys Lys Leu
 885 890 895

Gln Arg Leu Gln Leu Val Ser Cys Gly Leu Thr Ser Asp Cys Cys Gln
 900 905 910

Asp Leu Ala Ser Val Leu Ser Ala Ser Pro Ser Leu Lys Glu Leu Asp
 915 920 925

Leu Gln Gln Asn Asn Leu Asp Asp Val Gly Val Arg Leu Leu Cys Glu
 930 935 940

Gly Leu Arg His Pro Ala Cys Lys Leu Ile Arg Leu Gly Leu Asp Gln
 945 950 955 960

Thr Thr Leu Ser Asp Glu Met Arg Gln Glu Leu Arg Ala Leu Glu Gln
 965 970 975

Glu Lys Pro Gln Leu Leu Ile Phe Ser Arg Arg Lys Pro Ser Val Met
 980 985 990

Thr Pro Thr Glu Gly Leu Asp Thr Gly Glu Met Ser Asn Ser Thr Ser
 995 1000 1005

Ser Leu Lys Arg Gln Arg Leu Gly Ser Glu Arg Ala Ala Ser His
 1010 1015 1020

Val Ala Gln Ala Asn Leu Lys Leu Leu Asp Val Ser Lys Ile Phe
 1025 1030 1035

Pro Ile Ala Glu Ile Ala Glu Glu Ser Ser Pro Glu Val Val Pro
 1040 1045 1050

Val Glu Leu Leu Cys Val Pro Ser Pro Ala Ser Gln Gly Asp Leu
 1055 1060 1065

His Thr Lys Pro Leu Gly Thr Asp Asp Asp Phe Trp Gly Pro Thr

1070		1075		1080
Gly Pro Val Ala Thr Glu Val Val Asp Lys Glu Lys Asn Leu Tyr				
1085		1090		1095
Arg Val His Phe Pro Val Ala Gly Ser Tyr Arg Trp Pro Asn Thr				
1100		1105		1110
Gly Leu Cys Phe Val Met Arg Glu Ala Val Thr Val Glu Ile Glu				
1115		1120		1125
Phe Cys Val Trp Asp Gln Phe Leu Gly Glu Ile Asn Pro Gln His				
1130		1135		1140
Ser Trp Met Val Ala Gly Pro Leu Leu Asp Ile Lys Ala Glu Pro				
1145		1150		1155
Gly Ala Val Glu Ala Val His Leu Pro His Phe Val Ala Leu Gln				
1160		1165		1170
Gly Gly His Val Asp Thr Ser Leu Phe Gln Met Ala His Phe Lys				
1175		1180		1185
Glu Glu Gly Met Leu Leu Glu Lys Pro Ala Arg Val Glu Leu His				
1190		1195		1200
His Ile Val Leu Glu Asn Pro Ser Phe Ser Pro Leu Gly Val Leu				
1205		1210		1215
Leu Lys Met Ile His Asn Ala Leu Arg Phe Ile Pro Val Thr Ser				
1220		1225		1230
Val Val Leu Leu Tyr His Arg Val His Pro Glu Glu Val Thr Phe				
1235		1240		1245
His Leu Tyr Leu Ile Pro Ser Asp Cys Ser Ile Arg Lys Glu Leu				
1250		1255		1260
Glu Leu Cys Tyr Arg Ser Pro Gly Glu Asp Gln Leu Phe Ser Glu				
1265		1270		1275
Phe Tyr Val Gly His Leu Gly Ser Gly Ile Arg Leu Gln Val Lys				
1280		1285		1290
Asp Lys Lys Asp Glu Thr Leu Val Trp Glu Ala Leu Val Lys Pro				
1295		1300		1305

Gly Asp Leu Met Pro Ala Thr Thr Leu Ile Pro Pro Ala Arg Ile
 1310 1315 1320

Ala Val Pro Ser Pro Leu Asp Ala Pro Gln Leu Leu His Phe Val
 1325 1330 1335

Asp Gln Tyr Arg Glu Gln Leu Ile Ala Arg Val Thr Ser Val Glu
 1340 1345 1350

Val Val Leu Asp Lys Leu His Gly Gln Val Leu Ser Gln Glu Gln
 1355 1360 1365

Tyr Glu Arg Val Leu Ala Glu Asn Thr Arg Pro Ser Gln Met Arg
 1370 1375 1380

Lys Leu Phe Ser Leu Ser Gln Ser Trp Asp Arg Lys Cys Lys Asp
 1385 1390 1395

Gly Leu Tyr Gln Ala Leu Lys Glu Thr His Pro His Leu Ile Met
 1400 1405 1410

Glu Leu Trp Glu Lys Gly Ser Lys Lys Gly Leu Leu Pro Leu Ser
 1415 1420 1425

Ser

<210> 2622

<211> 179

<212> PRT

<213> Homo sapiens

<400> 2622

Met Ala Ala Leu Gln Lys Ser Val Ser Ser Phe Leu Met Gly Thr Leu
 1 5 10 15

Ala Thr Ser Cys Leu Leu Leu Leu Ala Leu Leu Val Gln Gly Gly Ala
 20 25 30

Ala Ala Pro Ile Ser Ser His Cys Arg Leu Asp Lys Ser Asn Phe Gln
 35 40 45

Gln Pro Tyr Ile Thr Asn Arg Thr Phe Met Leu Ala Lys Glu Ala Ser
 50 55 60

Leu Ala Asp Asn Asn Thr Asp Val Arg Leu Ile Gly Glu Lys Leu Phe
65 70 75 80

His Gly Val Ser Met Ser Glu Arg Cys Tyr Leu Met Lys Gln Val Leu
85 90 95

Asn Phe Thr Leu Glu Glu Val Leu Phe Pro Gln Ser Asp Arg Phe Gln
100 105 110

Pro Tyr Met Gln Glu Val Val Pro Phe Leu Ala Arg Leu Ser Asn Arg
115 120 125

Leu Ser Thr Cys His Ile Glu Gly Asp Asp Leu His Ile Gln Arg Asn
130 135 140

Val Gln Lys Leu Lys Asp Thr Val Lys Lys Leu Gly Glu Ser Gly Glu
145 150 155 160

Ile Lys Ala Ile Gly Glu Leu Asp Leu Leu Phe Met Ser Leu Arg Asn
165 170 175

Ala Cys Ile

<210> 2623

<211> 261

<212> PRT

<213> Homo sapiens

<400> 2623

Met Ser Arg Arg Tyr Asp Ser Arg Thr Thr Ile Phe Ser Pro Glu Gly
1 5 10 15

Arg Leu Tyr Gln Val Glu Tyr Ala Met Glu Ala Ile Gly His Ala Gly
20 25 30

Thr Cys Leu Gly Ile Leu Ala Asn Asp Gly Val Leu Leu Ala Ala Glu
35 40 45

Arg Arg Asn Ile His Lys Leu Leu Asp Glu Val Phe Phe Ser Glu Lys
50 55 60

Ile Tyr Lys Leu Asn Glu Asp Met Ala Cys Ser Val Ala Gly Ile Thr
65 70 75 80

Ser Asp Ala Asn Val Leu Thr Asn Glu Leu Arg Leu Ile Ala Gln Arg
85 90 95

Tyr Leu Leu Gln Tyr Gln Glu Pro Ile Pro Cys Glu Gln Leu Val Thr
 100 105 110

Ala Leu Cys Asp Ile Lys Gln Ala Tyr Thr Gln Phe Gly Gly Lys Arg
 115 120 125

Pro Phe Gly Val Ser Leu Leu Tyr Ile Gly Trp Asp Lys His Tyr Gly
 130 135 140

Phe Gln Leu Tyr Gln Ser Asp Pro Ser Gly Asn Tyr Gly Gly Trp Lys
 145 150 155 160

Ala Thr Cys Ile Gly Asn Asn Ser Ala Ala Ala Val Ser Met Leu Lys
 165 170 175

Gln Asp Tyr Lys Glu Gly Glu Met Thr Leu Lys Ser Ala Leu Ala Leu
 180 185 190

Ala Ile Lys Val Leu Asn Lys Thr Met Asp Val Ser Lys Leu Ser Ala
 195 200 205

Glu Lys Val Glu Ile Ala Thr Leu Thr Arg Glu Asn Gly Lys Thr Val
 210 215 220

Ile Arg Val Leu Lys Gln Lys Glu Val Glu Gln Leu Ile Lys Lys His
 225 230 235 240

Glu Glu Glu Glu Ala Lys Ala Glu Arg Glu Lys Lys Glu Lys Glu Gln
 245 250 255

Lys Glu Lys Asp Lys
 260

<210> 2624

<211> 377

<212> PRT

<213> Homo sapiens

<400> 2624

Met Lys Phe Pro Gly Pro Leu Glu Asn Gln Arg Leu Ser Phe Leu Leu
 1 5 10 15

Glu Lys Ala Ile Thr Arg Glu Ala Gln Met Trp Lys Val Asn Val Arg
 20 25 30

Lys Met Pro Ser Asn Gln Asn Val Ser Pro Ser Gln Arg Asp Glu Val
 35 40 45

Ile Gln Trp Leu Ala Lys Leu Lys Tyr Gln Phe Asn Leu Tyr Pro Glu
 50 55 60

Thr Phe Ala Leu Ala Ser Ser Leu Leu Asp Arg Phe Leu Ala Thr Val
 65 70 75 80

Lys Ala His Pro Lys Tyr Leu Ser Cys Ile Ala Ile Ser Cys Phe Phe
 85 90 95

Leu Ala Ala Lys Thr Val Glu Glu Asp Glu Arg Ile Pro Val Leu Lys
 100 105 110

Val Leu Ala Arg Asp Ser Phe Cys Gly Cys Ser Ser Ser Glu Ile Leu
 115 120 125

Arg Met Glu Arg Ile Ile Leu Asp Lys Leu Asn Trp Asp Leu His Thr
 130 135 140

Ala Thr Pro Leu Asp Phe Leu His Ile Phe His Ala Ile Ala Val Ser
 145 150 155 160

Thr Arg Pro Gln Leu Leu Phe Ser Leu Pro Lys Leu Ser Pro Ser Gln
 165 170 175

His Leu Ala Val Leu Thr Lys Gln Leu Leu His Cys Met Ala Cys Asn
 180 185 190

Gln Leu Leu Gln Phe Arg Gly Ser Met Leu Ala Leu Ala Met Val Ser
 195 200 205

Leu Glu Met Glu Lys Leu Ile Pro Asp Trp Leu Ser Leu Thr Ile Glu
 210 215 220

Leu Leu Gln Lys Ala Gln Met Asp Ser Ser Gln Leu Ile His Cys Arg
 225 230 235 240

Glu Leu Val Ala His His Leu Ser Thr Leu Gln Ser Ser Leu Pro Leu
 245 250 255

Asn Ser Val Tyr Val Tyr Arg Pro Leu Lys His Thr Leu Val Thr Cys
 260 265 270

Asp Lys Gly Val Phe Arg Leu His Pro Ser Ser Val Pro Gly Pro Asp

275

280

285

Phe Ser Lys Asp Asn Ser Lys Pro Glu Val Pro Val Arg Gly Thr Ala
 290 295 300

Ala Phe Tyr His His Leu Pro Ala Ala Ser Gly Cys Lys Gln Thr Ser
 305 310 315 320

Thr Lys Arg Lys Val Glu Glu Met Glu Val Asp Asp Phe Tyr Asp Gly
 325 330 335

Ile Lys Arg Leu Tyr Asn Glu Asp Asn Val Ser Glu Asn Val Gly Ser
 340 345 350

Val Cys Gly Thr Asp Leu Ser Arg Gln Glu Gly His Ala Ser Pro Cys
 355 360 365

Pro Pro Leu Gln Pro Val Ser Val Met
 370 375

<210> 2625

<211> 575

<212> PRT

<213> Homo sapiens

<400> 2625

Met Leu Gly Val Leu Val Leu Gly Ala Leu Ala Leu Ala Gly Leu Gly
 1 5 10 15

Phe Pro Ala Pro Ala Glu Pro Gln Pro Gly Gly Ser Gln Cys Val Glu
 20 25 30

His Asp Cys Phe Ala Leu Tyr Pro Gly Pro Ala Thr Phe Leu Asn Ala
 35 40 45

Ser Gln Ile Cys Asp Gly Leu Arg Gly His Leu Met Thr Val Arg Ser
 50 55 60

Ser Val Ala Ala Asp Val Ile Ser Leu Leu Leu Asn Gly Asp Gly Gly
 65 70 75 80

Val Gly Arg Arg Arg Leu Trp Ile Gly Leu Gln Leu Pro Pro Gly Cys
 85 90 95

Gly Asp Pro Lys Arg Leu Gly Pro Leu Arg Gly Phe Gln Trp Val Thr
 100 105 110

Gly Asp Asn Asn Thr Ser Tyr Ser Arg Trp Ala Arg Leu Asp Leu Asn
 115 120 125

Gly Ala Pro Leu Cys Gly Pro Leu Cys Val Ala Val Ser Ala Ala Glu
 130 135 140

Ala Thr Val Pro Ser Glu Pro Ile Trp Glu Glu Gln Gln Cys Glu Val
 145 150 155 160

Lys Ala Asp Gly Phe Leu Cys Glu Phe His Phe Pro Ala Thr Cys Arg
 165 170 175

Pro Leu Ala Val Glu Pro Gly Ala Ala Ala Ala Ala Val Ser Ile Thr
 180 185 190

Tyr Gly Thr Pro Phe Ala Ala Arg Gly Ala Asp Phe Gln Ala Leu Pro
 195 200 205

Val Gly Ser Ser Ala Ala Val Ala Pro Leu Gly Leu Gln Leu Met Cys
 210 215 220

Thr Ala Pro Pro Gly Ala Val Gln Gly His Trp Ala Arg Glu Ala Pro
 225 230 235 240

Gly Ala Trp Asp Cys Ser Val Glu Asn Gly Gly Cys Glu His Ala Cys
 245 250 255

Asn Ala Ile Pro Gly Ala Pro Arg Cys Gln Cys Pro Ala Gly Ala Ala
 260 265 270

Leu Gln Ala Asp Gly Arg Ser Cys Thr Ala Ser Ala Thr Gln Ser Cys
 275 280 285

Asn Asp Leu Cys Glu His Phe Cys Val Pro Asn Pro Asp Gln Pro Gly
 290 295 300

Ser Tyr Ser Cys Met Cys Glu Thr Gly Tyr Arg Leu Ala Ala Asp Gln
 305 310 315 320

His Arg Cys Glu Asp Val Asp Asp Cys Ile Leu Glu Pro Ser Pro Cys
 325 330 335

Pro Gln Arg Cys Val Asn Thr Gln Gly Gly Phe Glu Cys His Cys Tyr
 340 345 350

Pro Asn Tyr Asp Leu Val Asp Gly Glu Cys Val Glu Pro Val Asp Pro
 355 360 365

Cys Phe Arg Ala Asn Cys Glu Tyr Gln Cys Gln Pro Leu Asn Gln Thr
 370 375 380

Ser Tyr Leu Cys Val Cys Ala Glu Gly Phe Ala Pro Ile Pro His Glu
 385 390 395 400

Pro His Arg Cys Gln Met Phe Cys Asn Gln Thr Ala Cys Pro Ala Asp
 405 410 415

Cys Asp Pro Asn Thr Gln Ala Ser Cys Glu Cys Pro Glu Gly Tyr Ile
 420 425 430

Leu Asp Asp Gly Phe Ile Cys Thr Asp Ile Asp Glu Cys Glu Asn Gly
 435 440 445

Gly Phe Cys Ser Gly Val Cys His Asn Leu Pro Gly Thr Phe Glu Cys
 450 455 460

Ile Cys Gly Pro Asp Ser Ala Leu Ala Arg His Ile Gly Thr Asp Cys
 465 470 475 480

Asp Ser Gly Lys Val Asp Gly Gly Asp Ser Gly Ser Gly Glu Pro Pro
 485 490 495

Pro Ser Pro Thr Pro Gly Ser Thr Leu Thr Pro Pro Ala Val Gly Leu
 500 505 510

Val His Ser Gly Leu Leu Ile Gly Ile Ser Ile Ala Ser Leu Cys Leu
 515 520 525

Val Val Ala Leu Leu Ala Leu Leu Cys His Leu Arg Lys Lys Gln Gly
 530 535 540

Ala Ala Arg Ala Lys Met Glu Tyr Lys Cys Ala Ala Pro Ser Lys Glu
 545 550 555 560

Val Val Leu Gln His Val Arg Thr Glu Arg Thr Pro Gln Arg Leu
 565 570 575

<210> 2626
 <211> 332
 <212> PRT
 <213> Homo sapiens

<400> 2626

Met Ala Ala Val Phe Leu Val Thr Leu Tyr Glu Tyr Ser Pro Leu Phe
 1 5 10 15

Tyr Ile Ala Val Val Phe Thr Cys Phe Ile Val Thr Thr Gly Leu Val
 20 25 30

Leu Gly Trp Phe Gly Trp Asp Val Pro Val Ile Leu Arg Asn Ser Glu
 35 40 45

Glu Thr Gln Phe Ser Thr Arg Val Phe Lys Lys Gln Met Arg Gln Val
 50 55 60

Lys Asn Pro Phe Gly Leu Glu Ile Thr Asn Pro Ser Ser Ala Ser Ile
 65 70 75 80

Thr Thr Gly Ile Thr Leu Thr Thr Asp Cys Leu Glu Asp Ser Leu Leu
 85 90 95

Thr Cys Tyr Trp Gly Cys Ser Val Gln Lys Leu Tyr Glu Ala Leu Gln
 100 105 110

Lys His Val Tyr Cys Phe Arg Ile Ser Thr Pro Gln Ala Leu Glu Asp
 115 120 125

Ala Leu Tyr Ser Glu Tyr Leu Tyr Gln Glu Gln Tyr Phe Ile Lys Lys
 130 135 140

Asp Ser Lys Glu Glu Ile Tyr Cys Gln Leu Pro Arg Asp Thr Lys Ile
 145 150 155 160

Glu Asp Phe Gly Thr Val Pro Arg Ser Arg Tyr Pro Leu Val Ala Leu
 165 170 175

Leu Thr Leu Ala Asp Glu Asp Asp Arg Glu Ile Tyr Asp Ile Ile Ser
 180 185 190

Met Val Ser Val Ile His Ile Pro Asp Arg Thr Tyr Lys Leu Ser Cys
 195 200 205

Arg Ile Leu Tyr Gln Tyr Leu Leu Leu Ala Gln Gly Gln Phe His Asp
 210 215 220

Leu Lys Gln Leu Phe Met Ser Ala Asn Asn Asn Phe Thr Pro Ser Asn
 225 230 235 240

Asn Ser Ser Ser Glu Glu Lys Asn Thr Asp Arg Ser Leu Leu Glu Lys
 245 250 255

Val Gly Leu Ser Glu Ser Glu Val Glu Pro Ser Glu Glu Asn Ser Lys
 260 265 270

Asp Cys Val Val Cys Gln Asn Gly Thr Val Asn Trp Val Leu Leu Pro
 275 280 285

Cys Arg His Thr Cys Leu Cys Asp Gly Cys Val Lys Tyr Phe Gln Gln
 290 295 300

Cys Pro Met Cys Arg Gln Phe Val Gln Glu Ser Phe Ala Leu Cys Ser
 305 310 315 320

Gln Lys Glu Gln Asp Lys Asp Lys Pro Lys Thr Leu
 325 330

<210> 2627
 <211> 50
 <212> DNA
 <213> Homo sapiens

<400> 2627
 agagcacttg cagagcctgg gacaacctcc ttattgaagg gaagagggac 50

<210> 2628
 <211> 50
 <212> DNA
 <213> Homo sapiens

<400> 2628
 taaggagtgt tggagatatg tgatttggct agtgctatatt aaagacaccc 50

<210> 2629
 <211> 50
 <212> DNA
 <213> Homo sapiens

<400> 2629
 gccaaagacaa taagctaggc tactgggtcc agctactact ttggtgggat 50

<210> 2630
 <211> 50
 <212> DNA
 <213> Homo sapiens

<400> 2630
 gtaaaggcta tacttgtctt gttcaccttg ggatgacgcc gcatgatatg 50

<210> 2631
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2631
tgtcagagat tgcctgtggc tctaataatgc acctcaagat tttaaggaga 50

<210> 2632
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2632
ctttgcctaa accctatggc ctctgtgca tctgtactca ccctgtacca 50

<210> 2633
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2633
accttggggtt gagtaatgct cgtctgtgtg ttttagtttc atcacctggt 50

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<211> 2035

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 6383

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 2843

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<212> DNA

<213> Homo sapiens

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<212> DNA

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<211> 448

<212> DNA

<213> Homo sapiens

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<210> 2879

<211> 1257

<212> DNA

<213> Homo sapiens

<400> 2879

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<210> 2880
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 <212> DNA
 <213> Homo sapiens

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<211> 1847

<212> DNA

<213> Homo sapiens

<400> 2881

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<210> 2882
 <211> 1841
 <212> DNA
 <213> Homo sapiens

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<210> 2883
<211> 2243
<212> DNA
<213> Homo sapiens

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<220>
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<223> n is a, c, g, t or u

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<210> 2884
<211> 374
<212> DNA
<213> Homo sapiens

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<220>
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<223> n is a, c, g, t or u

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<220>
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<222> (151)..(151)
<223> n is a, c, g, t or u

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<220>
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<223> n is a, c, g, t or u

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<220>
<221> misc_feature

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<222> (312)..(312)
 <223> n is a, c, g, t or u

<220>
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 <223> n is a, c, g, t or u

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<210> 2885
 <211> 580
 <212> DNA
 <213> Homo sapiens

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 <222> (1)..(1)
 <223> n is a, c, g, t or u

<400> 2885
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<210> 2886
 <211> 836
 <212> DNA
 <213> Homo sapiens

<400> 2886
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<210> 2887
 <211> 742
 <212> DNA
 <213> Homo sapiens

<400> 2887
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 aaatgatgga tataagtggg agctgtatct agtgaagtgt ctgtcagtaa gtgaaacatt 120
 ttttggtggg ggcttatcca caaacagttt agttgtagaa taaaacttat gagtgacatc 180
 tggaaagtaa ccatgctaag atggcaagca cactggaaac aattaggcca cttggctttc 240
 ttttgctgta ttgttttata agcctacttt acctcccagt cttggaaaca agtttttagtt 300
 ttttattggg ttggagacta gagccaatag tataatgttc tcaaaggaaa cagacttgag 360
 ttgttggtatt agaggaacta acccaactta tatgattttg ttttggtttt ttgtcgtgta 420
 gttatggcac tgtcttattt ggaacatttg caactaggga taatacaaca tttttaactc 480
 tcatttgaca acctactact aatcacagac cacaagggtg atgaccaaatt ttatgtggtt 540
 tttgcactcc atagttgtct tagcccaatc tttctatact cttacgatta ctgggggttaa 600
 cgcttctgtg aggaccttct ggctcttgag ataccctaaa tatttacaga tacttagata 660
 tcttgaagat agaataggat atcgagattg taccaaataag gaatatcagg agtatggtac 720

aaatgagcag atacctgttg aa

742

<210> 2888

<211> 440

<212> DNA

<213> Homo sapiens

<400> 2888

ttttttgggt ttttaaggagt ttattgctaa tctgtaaaac agaaagagac aggagataag 60

catgacaaaa tatagggaag aaatgacttt tgcctaaact tccaaattgt gtacaattga 120

agcctctgct ttatagctct tagcacacct ctcaaataag aaggcagtac tgggaaggct 180

ctgaacctgt ggcagaacca ctgatagctg tggagctatt ccaaggagtc tgggaatcag 240

ggggattatc aagatcattg ttagaataaa ttaatcttac tgtatatata gcagaagttt 300

tcaagcatat gtaaattgcta ctaataacca aataattaca ctttgttttt ctttaaactg 360

taactctcaa gtatgtctct acataatttt ttgatggtag tgtctgcatg ctcaaaaagc 420

ttgaaaacac tactggagaa 440

<210> 2889

<211> 524

<212> DNA

<213> Homo sapiens

<400> 2889

tgcttattga aactgaaggg atgttgggaa agacagactg ggagctttct ctaaatttta 60

atacagcatc agtgcttcct ataattgtcca ggtaggaga gaagcaaattg gagctttact 120

aaggaagaga aagtgatcaa taccagttag aaaggtgaaa aaaaaaaaaa acaaacaaaa 180

acgaaaaaaaa aacctaagca aattcagtga gaaaagaaaa agcagaactt agagtcctta 240

cccttcaatt taaggaagga gagttattgc ctagcagaat cttgaaataa aatttcctta 300

gaaagcccca gaaagttttg tgtgtattgc aagtccaaag gataaggaga acttctatat 360

gctttcttct tatttccact gggcaaagta ctgctccatc aagactcagc ccgccatgag 420

gctttccaat caactctcaa ccaccacaac agttagggct ttttctctta tgttgcaaag 480

cactttctgc ataactcaga atgcaaaatg tactcattca ttg 524

<210> 2890

<211> 575

<212> DNA

<213> Homo sapiens

<400> 2890

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 60

ttttttggac ccaaaaaaaaa aaaactttta aggaaggggg acccagttaa aacccttcc 120


```

aatgcgggcc caaccctgcc ccacggaaac cggccatggc aaccctaaa taaaaagggg    180
tttttgagggc ggccggcccc caccctaaagg atgcccccaa tttttttttg ccagggggga    240
atgtccttgg acacgggggcc ccaaaattcc ccatgccggg ggtttgtact ttaaaagggc    300
ttcctaacct cctccgggtg ttcctaaggg ccatgctgga gctaaaactt gtaaaaaaag    360
gcccaggctt ccccgaggtc cgagtaaatt ttcacagggg gggggaacca cccctggcc    420
ttggggatatt tccgttgact ccaaaacagt ttggccacgg ccagaaccac atgggggtaa    480
tgctcacact ttttaaggga atccacgctt tggggcctcc tgtggggcct tgcttgagg    540
aagatggcct cacaccaaag gataccggag ttggg                                575

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<210> 2891
<211> 467
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (428)..(428)
<223> n is a, c, g, t or u

```

```

<400> 2891
tgatgccaag ccccgaggag ggctttatatt tttcttttca acatcctgga acgcggcttt    60
cctggccatt tttgcccgga tccccaaagac cccggcggtg gcacggccca taccgaaact    120
atgcaaggtt tcgaaattat cttttccctc acggacaact cgagctttct cttattata    180
ctaccttccc taccggcatg accggaccgg tcacctgggg ggccacgcac atttctacag    240
gaaaactggc tcccttcttg ggggcccagg gcttcctgtg gaaaaggatg agtttgagagc    300
ggtactccct cagccggtgc acgttgatct ggagggactc cgcggacttg ctctgctcc    360
tgggatccac aaaaatgcgc taagggtccgg cccaccttct tgggaatgcc gccaccctg    420
agctcctnca ggatgaatcc gcggccgact cgcaccttct tgggtac                                467

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<210> 2892
<211> 473
<212> DNA
<213> Homo sapiens

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<400> 2892
ttcatttaat ggcacatgat gatgcacaca aaacttcaac tctcagtctg gaatcagccc    60
acagggtctgc agctataaaa atcatctcga aaacatgaga tttcagagat ccagttctca    120
gtgttacctt gaagatgaca atttatgaag aaacaggtga ttttaatccg aaattgccag    180
gaaacaaatt actcctcaaa agcccttgga aagtaataag atagctaggc agaaaaaaaa    240
agattctgca aaactaaact taatgtgtat tcatctagac ctgaattaaa aataaaattc    300

```

cactataaaa agaatttttc aaaatggttag gcccaagaat atggccatat tgttccatct 360
 tgaagaaccc agttgattca gtttcattac tggcctcccc actcttctaa gtaagtcctt 420
 cactataaac atttacgaat tccatctcag cattagtact aaacaatatt cat 473

<210> 2893
 <211> 546
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (280)..(280)
 <223> n is a, c, g, t or u

<220>
 <221> misc_feature
 <222> (537)..(537)
 <223> n is a, c, g, t or u

<400> 2893
 cggtagtcaa ctacagttact tttaatatata aatgtctttt taccctagta aactactccc 60
 ttgcttaatg ggagaacttg caaatgagat ttaaaacatt gtaattttta taaggtaaca 120
 gaagctagat ccttttcact gttcatctca agctattgat cttgtcagtg ttgtacagat 180
 ctagaatggg ttgtcaggga taaggctact gatctgatgg tgattgttga catctgctga 240
 ctccacacaa caaccctagg ggaccgggtgc tttagacatn cttattttca gatgggttgc 300
 ccacttcatg cagttaacag ctgttggtgt tgggcttcaa atccagggtct ttcggacatc 360
 aaatcccagc ctcttaacaa ctaccaagc agtgattact actccccaac atagggggcag 420
 tatgtacaag tcatgttgaa ctaatacagt ttctttcttt gataggaata ctaattttgt 480
 tgaacaagaa aatatgtact ggataagagt aaggcatttg acaaggcgtc ctgtganatc 540
 tgtgaa 546

<210> 2894
 <211> 1993
 <212> DNA
 <213> Homo sapiens

<400> 2894
 actcatttat accaggaaac agacaagaga acaagaggct gccgaagaca aaacttctct 60
 gcaagcacct gtgcacagca atgtgcgtgg gcatctgtga gaagaagaga atctgtgaag 120
 tttagacaag cggccttccc aagatgtacc gaatatctca actgatgtca acaccagtag 180
 caagttcttc caggttggaag agagaatatg ctggagagct gtctcccacg tgcattttcc 240
 caagtttcac ctgtgattcc ctggatgggt accattcttt tgaatgcggc tccatagatc 300

```

ccctgacagg ctcccactat acctgtcgcc gaagtcccag actcctcacc aatgggtact 360
atatttggac tgaagacagc ttctgtgcg acaaagatgg caacataact ctgaacccat 420
cccagaccag cgttatgtat aaggagaact tagttagtac ctccaaatct tggctgcatg 480
gaagtatctt tggtgacatc aactcttctc caagtgaaga caactgggtg aaggggacca 540
ggaggttggg cacagaccat tgcaatggaa atgcagatga tttagactgt tcttctctga 600
ctgatgactg ggagtcaggg aagatgaatg cagagtctgt gatcacctcc tcttccagcc 660
acatcatatc tcagcctcct ggaggaaact cccatagctt gtctcttcag tcccagttga 720
cagcttctga acgtttccaa gagaatagtt cggatcattc agaaaccagg ttgttgcaag 780
aggtcttctt tcaggcaatc ctgcttgctg tgtgcttaat cacttctgca tgtgcaagat 840
ggtttatggg agaaatatta gccagtgtct tcacatgctc attgatgata actgtagctt 900
atgtgaaatc attgtttctc agccttgcca gctatttcaa aaccactgcc tgtgctcggg 960
ttgtcaaaat ttgacaacca tttaggaatg ccttcgatga atgtcctcca tctgaatatc 1020
tggaaattgt ccaacttgca gtctacttgg aatcaagtgt tttattggaa gggagtaagc 1080
gagtaatgga gaaaaagcca ttttagtttg actatgtgat tttaaaatga tctcagtttt 1140
tccatcaaaa ttataatatg ctcatgaaaa taatattaat ttgccttccc tttgcaaaca 1200
ccggcagttg aaaggaaaag gacggggaat gtgatggaaa agagaccgcc tggaataaat 1260
gtccccctat gattctttta ggagtggtt ctcgagcttg aattttcatt aggaaattct 1320
gtgaggagct tgtaaccaga tttctgggtc tgccacatgc acctatctct tgctgaattg 1380
ctttaataga ataatgagag caagtttgtc taactaatac caacctgaca acttgaataa 1440
caataaatgc aatttgtaca taaaatataa tgctgcaaaa gtttgtcatt cacctcagtg 1500
gagtgacttg atattaggtg gtaaccgtag atgatggtta atatgaaaat ggacaggaaa 1560
gaagcatttt ctgaaagtta tattcttttg aaccacgttc taaaccaagt ttttaatctt 1620
cttgggggtc gtaattacct ttacttttaa tgtcacttaa agatataaca cagaaaaatg 1680
ccttgagggc aaaatatagg caaacacca atgcgcttcc aaatgcatga aaatgggtgca 1740
gttgtaccct tgagccttga ctcaagggtc gtagatgttc cctttccacc cccacactt 1800
ggtgcgtgtt cacaaagcaa atatggcctg taattcaa at ttgttctatg tgatactctc 1860
tgagtaaaaa ctcatcatg cagaaaattg tctttgctcg aaatgataat gccaaaatat 1920
aactttatat ataatttgca tttagtacat ttttggttaa aaaataaact aataaataag 1980
tgaagtcac agc 1993

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<210> 2895

<211> 521
 <212> DNA
 <213> Homo sapiens

<400> 2895
 tgatggtttac ttaagcttta tttatatata tagtgcgtag gttcctggag cacaaagaag 60
 aaagttgctc agatttatcc agacctcaca taagtttata gatttcaagt agccactgta 120
 ttttattaca gaaaatacat tcttcaagag gaaaatgtta aggccatagc agctttcacc 180
 ttagctatct aagcttgtat taggtcatca ttaaatagta tctgtatcat tcttatgtgt 240
 tccgtaagtt atgccacaaa taccagacca agtacactca gtctagaaac aaaaaagtgg 300
 gaaataaagg ttaaaacatt ctaatagggtg taatgggctg atagatgact ttatattaca 360
 aagctactta agacaattct acttttctag aatacaacgc attaatataa acatttgaaa 420
 ttcagaagat ttggcctgtg gatgctttgt ttctcaatgc aattcttggt aatatgttag 480
 taagtaataa tttattaata ccaataataa aaaattaaca t 521

<210> 2896
 <211> 1679
 <212> DNA
 <213> Homo sapiens

<400> 2896
 gtttggttggc tgccggcagca ggtagcaaag tgacgccgag ggcctgagtg ctccagtagc 60
 caccgcatct ggagaaccag cggttaccat ggaggggatc agtatataca cttcagataa 120
 ctacaccgag gaaatgggct caggggacta tgactccatg aaggaaccct gtttccgtga 180
 agaaaatgct aatttcaata aaatcttctt gccaccatc tactccatca tcttcttaac 240
 tggcattgtg ggcaatggat tggtcacctt ggtcatgggt taccagaaga aactgagaag 300
 catgacggac aagtacaggc tgcacctgtc agtggccgac ctctcttttg tcatcacgct 360
 tcccttcttg gcagttgatg ccgtggcaaa ctggtaactt gggaacttcc tatgcaaggc 420
 agtccatgtc atctacacag tcaacctcta cagcagtgtc ctcatcctgg cttcatcag 480
 tctggaccgc tacctggcca tcgtccacgc caccaacagt cagaggccaa ggaagctggt 540
 ggctgaaaag gtgggtctatg ttggcgtctg gatccctgcc ctctgctga ctattcccga 600
 cttcatcttt gccaacgtca gtgaggcaga tgacagatat atctgtgacc gcttctaccc 660
 caatgacttg tgggtgggtg tgttccagtt tcagcacatc atgggtggcc ttatcctgcc 720
 tggattgtc atcctgtcct gctattgcat tatcatctcc aagctgtcac actccaaggg 780
 ccaccagaag cgcaaggccc tcaagaccac agtcactctc atcctggctt tcttcgctg 840
 ttggctgcct tactacattg ggatcagcat cgactccttc atcctcctgg aaatcatcaa 900
 gcaagggtgt gagtttgaga aactgtgca caagtggatt tccatcaccg aggccttagc 960

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tttcttccac tgttgtctga accccatcct ctatgctttc cttggagcca aatttataaac 1020
ctctgcccag cagcactca cctctgtgag cagaggggcc agcctcaaga tcctctccaa 1080
aggaaagcga ggtggacatt catctgtttc cactgagtct gagtcttcaa gttttcactc 1140
cagctaacac agatgtaaaa gacttttttt tatacgataa ataacttttt ttttaagttac 1200
acatttttca gatataaaaag actgaccaat attgtacagt ttttattgct tgttggattt 1260
ttgtcttggt tttcttttagt ttttgtgaag ttttaattgac ttattttatat aaattttttt 1320
tgtttcatat tgatgtgtgt ctaggcagga cctgtggcca agttcttagt tgctgtatgt 1380
ctcgtggtag gactgtagaa aagggaaactg aacattccag agcgtgtagt gaatcacgta 1440
aagctagaaa tgatccccag ctgtttatgc atagataatc tctccattcc cgtggaacgt 1500
ttttcctggt ctttaagacgt gatcttgctg tagaagatgg cacttataac caaagccaa 1560
agtggtagat aaatgctggt ttttcagttt tcaggagtgg gttgatttca gcacctacag 1620
tgtacagtct tgtattaagt tgtaataaaa agtacatggt aaacttactt agtggtatg 1679

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<210> 2897
 <211> 450
 <212> DNA
 <213> Homo sapiens

```

<400> 2897
ttttggcggg gcagggggtg gcgggggcag tcctttgaac taagattctc tcaggaacca 60
ctgcaggaaa tgaagtgatt cagaactcac caattatgaa ctaaccttca atgccagagg 120
ctttaacagt ttctaataaa aattcagttc agatctcaag ttcagataag tctgaaaaaa 180
cacttcaagg tcatctgaac gaacatattc taccagtact ttatataatt gtattttacct 240
gttcctaaaa ctttccgtga aagaaatggt gaattttctt cagaaatagt tttgagcaaa 300
atgtcaaaac aattctccca tgctcagtgt acttttgact atactctgaa aatatttctt 360
cttggttttc tgcacttacc tgtagtgtg ctcacactcc tgtattatgg aacatgttca 420
gtaactcata cacatgtaac acagaagtct 450

```

<210> 2898
 <211> 260
 <212> DNA
 <213> Homo sapiens

```

<400> 2898
ggcatgacta gaggtgtgac taataataat ccctcacatc tctatagcct aatacagttt 60
tccaagggtt ttctcatcca tgatctcatt tgatccttgc agcagtccta tgaggaaggc 120
agcacatata tcattagctc ccttttgcca aagaggaaac aaaaaacagg tgaaaggggac 180

```

ttgtctaagg gcacccagct ctaagggaca gagcaaagta acaggtcatt tctttttttc 240
 atttatTTTT agagacagag 260

<210> 2899
 <211> 452
 <212> DNA
 <213> Homo sapiens

<400> 2899
 tttttttttt tttttttttt tttttttttt tttttttttt tttggaaatt ggaaagggca 60
 aattaattaa gtttttttaa gccatcaagt tacaaagggc tattaggggt cttaaaaaga 120
 caaagagtat ccaataaaac aaaaagcaat tccagatggg tttaggtgga acaatTTTgg 180
 gccagttata tctataggcc attcctaatt tacttagcaa actttatccc ggggattggc 240
 aaattaaaaa aaaggaagaa ccaacctata ttttcttttc ggTTTTTTgg aaacagagcc 300
 tccactctgt catccaggct ggagtacagg ggggggatct cagctcaaca taccctcaac 360
 ctttgggggt caaggaatct cgggcctaac cctcccaagc agttgggact acaggcatgc 420
 accaccgggc tcggccaatt ttttgcattt tt 452

<210> 2900
 <211> 511
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (500)..(500)
 <223> n is a, c, g, t or u

<400> 2900
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 gatgTTTTaa cagagtggac aggtaataaa cacgttcaac aaaggcagat gttcttggag 120
 gttaaattccc actaatcaac acgattaact ttaagggtcc tgagactttc aatagcatgt 180
 acctcatgga ctaaaaaaga ggaagagttt atgcttcaca attaattctc agaacttgac 240
 acatgtaatt cttatcacca aggctttaga ttgaaaagta atagaaaaca acagtaactg 300
 ttctggtaca gtctagcatt tccaatgtgc ttctttttat tttaatgaaa aaaaaagata 360
 cattatatca aacaaaactg ttgatggatc cacatctttg caggctcttt gcggaatggc 420
 tcaccaaata cacatttcca tcttttagatc attatactgc ttaaacagca agatatgcta 480
 aagagatatg aatatgattn tgacctacca t 511

<210> 2901
 <211> 541

<212> DNA
 <213> Homo sapiens

<400> 2901

```

tttttttttt tttttttcct gacgtataca gatcatcctg gacagtttat ttctctaatt    60
ctgttaatca aagcagagat cagaacggat taactgtggc aacgtcgtat caggagcaca    120
aagagaagcc tgccctcttc agtttggtct tttctccagc aaaacagaaa tgcaatttag    180
tcaaacacat acagaggccc cactgtactg cctcactgat ggagggaat acttgggtgc    240
aatcacacac agtgtagtg attggcaact gtccagtgtc atttcgctaa aactggtaaa    300
aacagtttcc ttgggcaagc agctgattgg ctacttcata ctgtgctgag ttgggctcag    360
cttgtctgtc tctgggaggc cctaaggggc tcctcttttt cagctaggga taaggggaga    420
ctgtcaacca gtatcttagc gtgaactgtc aatcgctgag cccctgccaa ggactctctg    480
gaagtccttc aggtatgctg aaaatacctt atactgaaaa ggtagctctc gctgcatcca    540
c                                                                           541
  
```

<210> 2902
 <211> 646
 <212> DNA
 <213> Homo sapiens

<400> 2902

```

gaattaaaaa taatactttt attgctggtt atgctttctt aaaagtaaaa attattcttg    60
attgatgtga cttgccagaa tgtttgaaac accagtgacc aagggtcact atatctgccc    120
ccaaacaatt ccaccatgtt tacttatata gcactcacca aaccagaaga gaggctggga    180
tattctcagg ccaactgcact gaacatcaat atgaaagaac catgaatgat gcgacaactg    240
agttgatttt ctacctctc tgcccaccat gactttgcac cccaaattct ttcagtgtct    300
tttcaaggta caaccctcct tctgggcaca ggttggtctg gtcacctcaa ggtatgttcc    360
ttcattctgc agtgatttcc tgccctctgt caattaagga agttgagaat acagataact    420
caggatcatg tttaattatg taaaaaagct ctaaagtcag gtaatggttt tcatgtgctt    480
ctcttgagca gtctgaggag agaatagaaa cagaaacccc ttggggcctg agtagacgca    540
gctggccatg cacaggcaga ggctcttggc cagtgcagga agcagagtca cagccatcgc    600
cttgggggtg ggatgaaatg agatgacctg ttggctgtat gacagc                    646
  
```

<210> 2903
 <211> 557
 <212> DNA
 <213> Homo sapiens

<400> 2903

```

atctcaaagg caattgagtg ggtcttcttg gccagacctt tttaatttac gaaacatagt    60
  
```

```

accttgcaga gaatagggcat tgaaatatta tttaaacaat caaaccaaag atgttcttct 120
atcttcagct gtcagtgate taatgccctc atctctctta tcctcaggac ccagaatggg 180
atattccaca taaaagatgc ttgttttatc aaatgaatca aaaagcacgc ctgaggcatt 240
tatttttact cctttacttc tgtaggccag gtcaagggtg gtctaattca cttttatcat 300
cagcacttaa gaaactggat ggaagaccac aacaccttgt tttttgcaa aattttccat 360
ctcctcaatc aggccaggaa gcatgtatct tctggacagg actttatctc tctactcagc 420
ttagtacact gccttatatt agtccatttg tcccatgttt tcatcactga ataaacttgt 480
taaatgactt ttggtctgga tctcacacct atattacttc atttccttct gtgagcactc 540
tataatgata acatcat 557

```

```

<210> 2904
<211> 488
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (239)..(239)
<223> n is a, c, g, t or u

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<400> 2904
gcggccgcgg aaactttgca ggcccgcggc atcgagcacg gcgggcctag ggcggtgtg 60
tgcgcgtggg tcgcgaggtg acaggagccg gccctcgctc ttaatggagc ggccagagct 120
gggtgggggc ggcccgggag ctcggggttc ccggcactac ctgaatgcag cccgaagcca 180
agttgtgcac gcgtttgtcc tataaaagcg aagtgagtggt attcccattt tggaatccnc 240
ggtgtctcca acctcgagtt ggagaacat gttgagtcag ttccccggaa cttacaaat 300
ggactccact tcccccgctc ccattctacc gtttttttta aaaaatgatt tttttgagtg 360
gcggttccag gattagtcaa atagcttctc ccgagaatgc tctttaaaag attgtcagac 420
acctttgggt taagtctcag tttttgcatg ggcccgaatt gcagtcctat gaatttctga 480
tttattca 488

```

```

<210> 2905
<211> 696
<212> DNA
<213> Homo sapiens

```

```

<400> 2905
ttcccccccc ccccccccc ccccgccgga gcacaggaca cagctggggt ctgaagcttc 60
tgagttctgc agcctcacct ctgagaaaac ctcttttcca ccaataccat gaagctctgc 120

```



```

gtgactgtcc tgtctctcct catgctagta gctgccttct gctctccagc gctctcagca    180
ccaatgggct cagaccctcc caccgcctgc tgcttttctt acaccgagag gaagcttctt    240
cgcaactttg tggtagatta ctatgagacc agcagcctct gctcccagcc agctgtggta    300
ttccaaacca aaagaagcaa gcaagtctgt gctgatccca gtgaatcctg ggtccaggag    360
tacgtgtatg acctggaact gaactgagct gctcagagac aggaagtctt caggggaaggt    420
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<210> 2906
 <211> 347
 <212> DNA
 <213> Homo sapiens

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<400> 2906
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tatttgtcat ctgaactact tttctatctt ttacctcttc caatagataa gttattagaa    180
ggcaaatatt gcttcttgat tttttgtttt ccgtctatct aagcttgaat tttatgtgca    240
cgtaaggtag atgtgaaatt catgggcac aaatatgggt gggtaaaata taattttgtt    300
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<210> 2907
 <211> 549
 <212> DNA
 <213> Homo sapiens

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<400> 2907
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gacacagccg ttcaccagc cacagatagt gacagggcac acatggcgac acccacatgt    180
acggagataa atctcccca ccatgacatg ggtagacaga aaacacgccg cagtatactc    240
tagtatgttt acacaaacag ggagacaggc ccgtgcaatg catgtcacca acaccacac    300
tcagagtgac atctgctgga ggtgctcaga cacagccacc caccgtgaca tgccgagact    360
cacatatgtc acatgacaca ggcattcatg ccacattcac tgtgactctc agtcctattc    420
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gcgcacgcac acacgcacac acacgaacac acgcgcacac acgcacacac acgcacgcag 540
gtgtacaca 549

<210> 2908
<211> 400
<212> DNA
<213> Homo sapiens

<400> 2908
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<210> 2909
<211> 547
<212> DNA
<213> Homo sapiens

<400> 2909
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accccg 547

<210> 2910
<211> 549
<212> DNA
<213> Homo sapiens

<400> 2910
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attcgctatt catcacaccc cgaagattga gatccactgt atttacacaa agcaaagcca	180
tgtcagcaag ggactgtcaa cctgattctg agaacataaa cattcaaaat ttattttcca	240
gtgttccttt ttggaaacca acaacacatc tttaatacct acacacacac acatctctac	300
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ttaagttaaa attaattctt attttgtggg cacccttttag tgaactaaaa tctacatgaa	420
accttttggc ttttgtgtag caggaaatac ccacgttttg ggtcaattag tgcagatggg	480
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<210> 2911
 <211> 408
 <212> DNA
 <213> Homo sapiens

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aaccggactc cgcccacttc ctgcgccctg cgggtgcgagg gtgtggaatc ctccagacgc	240
tggggggaggg ggagttggga gcttaaaaac tagtaccctt ttgggaccac tttcagcagc	300
gaactctcct gtacaccagg ggtcagttcc acagacgcgg gccaggggtg ggtcattgcg	360
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<210> 2912
 <211> 525
 <212> DNA
 <213> Homo sapiens

<400> 2912	
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ctatcttcag ctgtcagtga tctaattgcc tcattctctt tctcctcagg acccagaatg	180
gtatattcca cataaaagat gctttgttta tcaaatgaat caaaaagcac gcctgaggca	240
tttattttta ctcttttact tctgtaggcc aggtcaagggt ggggtctaatt cacttttctc	300
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<210> 2913
 <211> 1085
 <212> DNA
 <213> Homo sapiens

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<210> 2914
 <211> 2610
 <212> DNA
 <213> Homo sapiens

<400> 2914
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 gccaccaacc cacagccgca gccgcctcct ccggcgccgc cgctcccccc gccgcagccg 180

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<210> 2915
<211> 279
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (86)..(118)
<223> n is a, c, g, t or u

<400> 2915
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tgtaaaagga tagtgtttgc atctagagga ctagagacat gcctgcacat ccctcacctt 180
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ttgtgtagta cctcggccgc gaccacgcta atcactagt 279

<210> 2916
<211> 1082
<212> DNA
<213> Homo sapiens

<400> 2916
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cgcagcccga agattcacta tgggtgaaaat cgccttcaat acccctaccg ccgtgcaaaa 180
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<210> 2917
<211> 610
<212> DNA
<213> Homo sapiens

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<220>
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<222> (7)..(8)
<223> n is a, c, g, t or u

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<220>
<221> misc_feature
<222> (605)..(605)
<223> n is a, c, g, t or u

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<220>
<221> misc_feature
<222> (608)..(608)
<223> n is a, c, g, t or u

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aacttatttt gattgtatcc atgcaatcta agacaataaa aatagaagaa aaaacagcca    240
cataaacagc aaagtgttat tactgattta attgaattga tttgacattt tcagtccact    300

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<210> 2918
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 <212> DNA
 <213> Homo sapiens

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<210> 2919

<211> 2232

<212> DNA

<213> Homo sapiens

<400> 2919

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attaattagt taccacctat atataaatat atgtaatcaa tttcttcaaa tagcttgctt 1380
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caggctgtcg ctggccatcc attcagtcga ttcagtcata ggcgaatctg ttctgcccga 1860
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cccacagggt agttcagtc aagcaggcaa ccccttctg ggcactgacc ctgccactgg 1980
ggcatggcg gttgtggcag ctggggaggt ttggcccaa cagccctcct gtgcctgctt 2040
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ctctggggac tgctgggggg tacagagga gaaggctctg caagagctcc ctggcaatac 2160
ccccttgtgt aattgctttg tgtgcgacag ggaggaagtt tcaataaagc aacaacaagc 2220
ttcaaggaat tc 2232

<210> 2920
<211> 1620
<212> DNA
<213> Homo sapiens

<400> 2920
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aaggaggtct ccaggacgga cttcagatca ctgtcaatgg gaccgttctc agctccagtg 180
gaaccagggt tgctgtgaac tttcagactg gcttcagtgg aaatgacatt gccttcact 240
tcaaccctcg gtttgaagat ggagggtacg tgggtgtgaa cacgaggcag aacggaagct 300
gggggcccga ggagaggagg acacacatgc ctttccagaa ggggatgcc tttgacctct 360
gcttcctggt gcagagctca gatttcaagg tgatggtgaa cgggatcctc ttcgtgcagt 420
acttcaccg cgtgcccttc caccgtgtgg acaccatctt cgtcaatggc tctgtgcagc 480
tgtcctacat cagcttccag cctcccggcg tgtggcctgc caaccggct cccattaccc 540

agacagtcac ccacacagtg cagagcgccc ctggacagat gttctctact cccgccatcc 600
 cacctatgat gtacccccac cccgcctatc cgatgccttt catcaccacc attctgggag 660
 ggctgtaccc atccaagtcc atcctcctgt caggcactgt cctgcccagt gctcagaggt 720
 tccacatcaa cctgtgctct gggaaccaca tcgccttcca cctgaacctc cgttttgatg 780
 agaatgctgt ggtccgcaac acccagatcg acaactcctg ggggtctgag gagcgaagtc 840
 tgccccgaaa aatgcccttc gtccgtggcc agagcttctc agtgtggatc ttgtgtggag 900
 ctactgcct caaggtggcc gtggatggtc agcacctgtt tgaatactac catcgctga 960
 ggaacctgcc caccatcaac agactggaag tggggggcga catccagctg acccatgtgc 1020
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 tcaactctac cttgcaccgt gcaccaaccc ttcacccctc ctggaaagca ggctgatgg 1500
 cttcccactg gcctccacca cctgaccaga gtgttctctt cagaggactg gctcctttcc 1560
 cagtgtcctt aaaataaaga aatgaaaatg cttgttggca aaaaaaaaaa aaaaaaaaaa 1620

<210> 2921
 <211> 916
 <212> DNA
 <213> Homo sapiens

<400> 2921
 acttctcgct cgacacagcc agagctggag gtgggtgccc ggcacggagg ggctgcgga 60
 ccaatggctc tgccctgcac cttagggctc gggatgctgc tggccctgcc aggggccttg 120
 ggctcgggtg gcagcgcgga ggacagcgtg ggctccagct ctgtcaccgt tgtcctgctg 180
 ctgctgctgc tcctactgct ggccactggc ctagcactgg cctggcgccg cctcagccgt 240
 gactcagggg gctactacca cccggcccgc ctaggtgccg cgctgtgggg ccgcacgcgg 300
 cgctgctct gggccagccc cccaggtcgc tggctgcagg cccgagctga gctgggtgcc 360
 acagacaatg accttgagcg acaggaggat gagcaggaca cagactatga ccagtcgcg 420
 gatgggtggc tgcaggctga ccctggggaa ggcgagcagc aatgtggaga ggctccagc 480
 ccagagcagg tccccgtgcg ggctgaggaa gccagagaca gtgacacgga gggcgacctg 540

gtcctcggct cccagacc agcgagcgca gggggcagtg ctgaggccct gctgagtgc 600
 ctgcacgcct ttgctggcag cgcagcctgg gatgacagcg ccagggcagc tgggggccag 660
 ggctccatg tcaccgcact gtagaggccg gtcttggtgt cccatccctg tcacagccgc 720
 tcactccccg tgctctgtgt tcccaagatg ccatggctgg actggacccc cagcccacat 780
 gaccatgcct cagactgtca cccctaccag ttcccaagtc catgtgtacc ccgctcacca 840
 cggaacggc ccccccaac cacaggcatc aggcaaccat ttgaaataaa actccttcag 900
 cctgtgaaaa aaaaaa 916

<210> 2922

<211> 1272

<212> DNA

<213> Homo sapiens

<400> 2922

gaattcggcc aaagaggcct atgcttctct gaagacttgc agcaaggctt gctgaggctc 60
 acagaagata gcccagtggt ttggagtggt ttttgaatgt gattctgaga tcagactgac 120
 tgagctggaa tcctggcttt atatcttacc agctacacaa ccttgagtc ttagaaat 180
 tttcttttca ataagcagtc atccttactt tccctcaaga tgacaaacag ttcgttcttc 240
 tgcccagttt ataaagatct ggagccattc acgtatcttt tttatttagt tttccttggt 300
 ggaattattg gaagttgttt tgcaacctgg gcttttatac agaagaatac gaatcacagg 360
 tgtgtgagca tctacttaat taatttgctt acagccgatt tcctgcttac tctggcatta 420
 ccagtgaaaa ttgttggtga cttgggtgtg gcaccttgga agctgaagat attccactgc 480
 caagtaacag cctgcctcat ctatatcaat atgtatttat caattatctt cttagcattt 540
 gtcagcattg accgctgtct tcagctgaca cacagctgca agatctaccg aatacaagaa 600
 cccggatttg ccaaaatgat atcaaccgtt gtgtggctaa tggctccttct tataatgggtg 660
 ccaaatatga tgattcccat caaagacatc aaggaaaagt caaatgtggg ttgtatggag 720
 tttaaaaagg aatttggaag aaattggcat ttgtgacaa atttcatatg ttagcaata 780
 tttttaaaatt tctcagccat cattttaata tccaattgcc ttgtaattcg acagctctac 840
 agaaacaaag ataatgaaaa ttacccaaat gtgaaaaagg ctctcatcaa catactttta 900
 gtgaccacgg gctacatcat atgctttgtt ccttaccaca ttgtccgaat cccgtatacc 960
 ctcagccaga cagaagtcac aactgattgc tcaaccagga tttcactctt caaagccaaa 1020
 gaggctacac tgctcctggc tgtgtcgaaac ctgtgctttg atcctatcct gtactatcac 1080
 ctctcaaaag cattccgctc aaaggctcact gagacttttg cctcacctaa agagaccaag 1140
 gctcagaaag aaaaattaag atgtgaaaat aatgcataaa agacaggatt tttgtgcta 1200

ccaattctgg ccttactgga ccataaagtt aattatagct ttgaaagata aaaaaaaaaa 1260
 aaaagcggcc gc 1272

<210> 2923
 <211> 413
 <212> DNA
 <213> Homo sapiens

<400> 2923
 tttttttttt tttttgtaga gggtcacatc aatccatagg aaaggaaacc tgcttcttct 60
 caciaaggga taacttttgt tttcctcatg agtcaacttg aaggataact ttaaaaaatt 120
 ggtccatgca gcagagtggg actccgtctc aaaaaaaaaa aaaaaaaaaa aaaaagggtcc 180
 atgcagaaga ctatcttttt ccaatttgta taagggaact atgtaagttc actgtagctc 240
 tgggtatcct caaccacag atctggcagg cagcttgagc cccatcttca gaggagggcc 300
 aagtgtccat tcagactcgg gtatttccac actagctgtc tttgagttcc atcaagtaga 360
 tagagaactt ctgatccaag ggattttata gagattacaa cccctcgtg ccg 413

<210> 2924
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 2924
 tttttttttt tgcttcaatt cttttctata caaccgtggg tctcaaccag gggtccttct 60
 ggtccccagg ggatgctagg tgggtgtctgg gggcatttgt gactgttatg actcagggat 120
 gctcctggcg tggagtgggt ggaggccagg gatgctgatc agaaccttgc agtggccagg 180
 acaacccac cccagagaac gaccagccc tgaatgccaa gggggagaga ctctgcctta 240
 attatttgga aaaatattgt atctgctccc tgttgacacc agacactaga aaaaattccc 300
 gatgggggtgg atggcagaaa ccaagggggg cccagctcc tgcgattctc ctctctctc 360
 cctccccact cagggtgtgg attacaatgt gtgcagcctc ctggaacctc aggaggacag 420
 aggatcatga gacacagagt ttcttgggga tctgtggaat cccctaacc ccg 474

<210> 2925
 <211> 199
 <212> PRT
 <213> Homo sapiens

<400> 2925

Met Ser Ser Glu Asn Cys Phe Val Ala Glu Asn Ser Ser Leu His Pro
 1 5 10 15

Glu Ser Gly Gln Glu Asn Asp Ala Thr Ser Pro His Phe Ser Thr Arg
20 25 30

His Glu Gly Ser Phe Gln Val Pro Val Leu Cys Ala Val Met Asn Val
35 40 45

Val Phe Ile Thr Ile Leu Ile Ile Ala Leu Ile Ala Leu Ser Val Gly
50 55 60

Gln Tyr Asn Cys Pro Gly Gln Tyr Thr Phe Ser Met Pro Ser Asp Ser
65 70 75 80

His Val Ser Ser Cys Ser Glu Asp Trp Val Gly Tyr Gln Arg Lys Cys
85 90 95

Tyr Phe Ile Ser Thr Val Lys Arg Ser Trp Thr Ser Ala Gln Asn Ala
100 105 110

Cys Ser Glu His Gly Ala Thr Leu Ala Val Ile Asp Ser Glu Lys Asp
115 120 125

Met Asn Phe Leu Lys Arg Tyr Ala Gly Arg Glu Glu His Trp Val Gly
130 135 140

Leu Lys Lys Glu Pro Gly His Pro Trp Lys Trp Ser Asn Gly Lys Glu
145 150 155 160

Phe Asn Asn Trp Phe Asn Val Thr Gly Ser Asp Lys Cys Val Phe Leu
165 170 175

Lys Asn Thr Glu Val Ser Ser Met Glu Cys Glu Lys Asn Leu Tyr Trp
180 185 190

Ile Cys Asn Lys Pro Tyr Lys
195

<210> 2926

<211> 326

<212> PRT

<213> Homo sapiens

<400> 2926

Met Asp Tyr Ser His Gln Thr Ser Leu Val Pro Cys Gly Gln Asp Lys
1 5 10 15

Tyr Ile Ser Lys Asn Glu Leu Leu Leu His Leu Lys Thr Tyr Asn Leu
20 25 30

Tyr Tyr Glu Gly Gln Asn Leu Gln Leu Arg His Arg Glu Glu Glu Asp
 35 40 45

Glu Phe Ile Val Glu Gly Leu Leu Asn Ile Ser Trp Gly Leu Arg Arg
 50 55 60

Pro Ile Arg Leu Gln Met Gln Asp Asp Asn Glu Arg Ile Arg Pro Pro
 65 70 75 80

Pro Ser Ser Ser Ser Trp His Ser Gly Cys Asn Leu Gly Ala Gln Gly
 85 90 95

Thr Thr Leu Lys Pro Leu Thr Val Pro Lys Val Gln Ile Ser Glu Val
 100 105 110

Asp Ala Pro Pro Glu Gly Asp Gln Met Pro Ser Ser Thr Asp Ser Arg
 115 120 125

Gly Leu Lys Pro Leu Gln Glu Asp Thr Pro Gln Leu Met Arg Thr Arg
 130 135 140

Ser Asp Val Gly Val Arg Arg Arg Gly Asn Val Arg Thr Pro Ser Asp
 145 150 155 160

Gln Arg Arg Ile Arg Arg His Arg Phe Ser Ile Asn Gly His Phe Tyr
 165 170 175

Asn His Lys Thr Ser Val Phe Thr Pro Ala Tyr Gly Ser Val Thr Asn
 180 185 190

Val Arg Ile Asn Ser Thr Met Thr Thr Pro Gln Val Leu Lys Leu Leu
 195 200 205

Leu Asn Lys Phe Lys Ile Glu Asn Ser Ala Glu Glu Phe Ala Leu Tyr
 210 215 220

Val Val His Thr Ser Gly Glu Lys Gln Lys Leu Lys Ala Thr Asp Tyr
 225 230 235 240

Pro Leu Ile Ala Arg Ile Leu Gln Gly Pro Cys Glu Gln Ile Ser Lys
 245 250 255

Val Phe Leu Met Glu Lys Asp Gln Val Glu Glu Val Thr Tyr Asp Val
 260 265 270

Ala Gln Tyr Ile Lys Phe Glu Met Pro Val Leu Lys Ser Phe Ile Gln
 275 280 285

Lys Leu Gln Glu Glu Glu Asp Arg Glu Val Lys Lys Leu Met Arg Lys
 290 295 300

Tyr Thr Val Leu Arg Leu Met Ile Arg Gln Arg Leu Glu Glu Ile Ala
 305 310 315 320

Glu Thr Pro Ala Thr Ile
 325

<210> 2927

<211> 364

<212> PRT

<213> Homo sapiens

<400> 2927

Met Pro Leu Leu Leu Leu Leu Pro Leu Leu Trp Ala Gly Ala Leu Ala
 1 5 10 15

Met Asp Pro Asn Phe Trp Leu Gln Val Gln Glu Ser Val Thr Val Gln
 20 25 30

Glu Gly Leu Cys Val Leu Val Pro Cys Thr Phe Phe His Pro Ile Pro
 35 40 45

Tyr Tyr Asp Lys Asn Ser Pro Val His Gly Tyr Trp Phe Arg Glu Gly
 50 55 60

Ala Ile Ile Ser Gly Asp Ser Pro Val Ala Thr Asn Lys Leu Asp Gln
 65 70 75 80

Glu Val Gln Glu Glu Thr Gln Gly Arg Phe Arg Leu Leu Gly Asp Pro
 85 90 95

Ser Arg Asn Asn Cys Ser Leu Ser Ile Val Asp Ala Arg Arg Arg Asp
 100 105 110

Asn Gly Ser Tyr Phe Phe Arg Met Glu Arg Gly Ser Thr Lys Tyr Ser
 115 120 125

Tyr Lys Ser Pro Gln Leu Ser Val His Val Thr Asp Leu Thr His Arg
 130 135 140

Pro Lys Ile Leu Ile Pro Gly Thr Leu Glu Pro Gly His Ser Lys Asn

145	150	155	160
Leu Thr Cys Ser Val Ser Trp Ala Cys Glu Gln Gly Thr Pro Pro Ile	165	170	175
Phe Ser Trp Leu Ser Ala Ala Pro Thr Ser Leu Gly Pro Arg Thr Thr	180	185	190
His Ser Ser Val Leu Ile Ile Thr Pro Arg Pro Gln Asp His Gly Thr	195	200	205
Asn Leu Thr Cys Gln Val Lys Phe Ala Gly Ala Gly Val Thr Thr Glu	210	215	220
Arg Thr Ile Gln Leu Asn Val Thr Tyr Val Pro Gln Asn Pro Thr Thr	225	230	235
Gly Ile Phe Pro Gly Asp Gly Ser Gly Lys Gln Glu Thr Arg Ala Gly	245	250	255
Leu Val His Gly Ala Ile Gly Gly Ala Gly Val Thr Ala Leu Leu Ala	260	265	270
Leu Cys Leu Cys Leu Ile Phe Phe Ile Val Lys Thr His Arg Arg Lys	275	280	285
Ala Ala Arg Thr Ala Val Gly Ser Asn Asp Thr His Pro Thr Thr Gly	290	295	300
Ser Ala Ser Pro Lys His Gln Lys Asn Ser Lys Leu His Gly Pro Thr	305	310	315
Glu Thr Ser Ser Cys Ser Gly Ala Ala Pro Thr Val Glu Met Asp Glu	325	330	335
Glu Leu His Tyr Ala Ser Leu Asn Phe His Gly Met Asn Pro Ser Lys	340	345	350
Asp Thr Ser Thr Glu Tyr Ser Glu Val Arg Thr Gln	355	360	
<210> 2928			
<211> 326			
<212> PRT			
<213> Homo sapiens			
<400> 2928			

Met Asp Tyr Ser His Gln Thr Ser Leu Val Pro Cys Gly Gln Asp Lys
 1 5 10 15
 Tyr Ile Ser Lys Asn Glu Leu Leu Leu His Leu Lys Thr Tyr Asn Leu
 20 25 30
 Tyr Tyr Glu Gly Gln Asn Leu Gln Leu Arg His Arg Glu Glu Glu Asp
 35 40 45
 Glu Phe Ile Val Glu Gly Leu Leu Asn Ile Ser Trp Gly Leu Arg Arg
 50 55 60
 Pro Ile Arg Leu Gln Met Gln Asp Asp Asn Glu Arg Ile Arg Pro Pro
 65 70 75 80
 Pro Ser Ser Ser Ser Trp His Ser Gly Cys Asn Leu Gly Ala Gln Gly
 85 90 95
 Thr Thr Leu Lys Pro Leu Thr Val Pro Lys Val Gln Ile Ser Glu Val
 100 105 110
 Asp Ala Pro Pro Glu Gly Asp Gln Met Pro Ser Ser Thr Asp Ser Arg
 115 120 125
 Gly Leu Lys Pro Leu Gln Glu Asp Thr Pro Gln Leu Met Arg Thr Arg
 130 135 140
 Ser Asp Val Gly Val Arg Arg Arg Gly Asn Val Arg Thr Pro Ser Asp
 145 150 155 160
 Gln Arg Arg Ile Arg Arg His Arg Phe Ser Ile Asn Gly His Phe Tyr
 165 170 175
 Asn His Lys Thr Ser Val Phe Thr Pro Ala Tyr Gly Ser Val Thr Asn
 180 185 190
 Val Arg Ile Asn Ser Thr Met Thr Thr Pro Gln Val Leu Lys Leu Leu
 195 200 205
 Leu Asn Lys Phe Lys Ile Glu Asn Ser Ala Glu Glu Phe Ala Leu Tyr
 210 215 220
 Val Val His Thr Ser Gly Glu Lys Gln Lys Leu Lys Ala Thr Asp Tyr
 225 230 235 240

Pro Leu Ile Ala Arg Ile Leu Gln Gly Pro Cys Glu Gln Ile Ser Lys
 245 250 255

Val Phe Leu Met Glu Lys Asp Gln Val Glu Glu Val Thr Tyr Asp Val
 260 265 270

Ala Gln Tyr Ile Lys Phe Glu Met Pro Val Leu Lys Ser Phe Ile Gln
 275 280 285

Lys Leu Gln Glu Glu Glu Asp Arg Glu Val Lys Lys Leu Met Arg Lys
 290 295 300

Tyr Thr Val Leu Arg Leu Met Ile Arg Gln Arg Leu Glu Glu Ile Ala
 305 310 315 320

Glu Thr Pro Ala Thr Ile
 325

<210> 2929

<211> 1842

<212> PRT

<213> Homo sapiens

<400> 2929

Leu Pro His Gly Arg Thr Arg Gly Pro Gly Pro Ala Met Ala Pro Trp
 1 5 10 15

Arg Lys Ala Asp Lys Glu Arg His Gly Val Ala Ile Tyr Asn Phe Gln
 20 25 30

Gly Ser Gly Ala Pro Gln Leu Ser Leu Gln Ile Gly Asp Val Val Arg
 35 40 45

Ile Gln Glu Thr Cys Gly Asp Trp Tyr Arg Gly Tyr Leu Ile Lys His
 50 55 60

Lys Met Leu Gln Gly Ile Phe Pro Lys Ser Phe Ile His Ile Lys Glu
 65 70 75 80

Val Thr Val Glu Lys Arg Arg Asn Thr Glu Asn Ile Ile Pro Ala Glu
 85 90 95

Ile Pro Leu Ala Gln Glu Val Thr Thr Thr Leu Trp Glu Trp Gly Ser
 100 105 110

Ile Trp Lys Gln Leu Tyr Val Ala Ser Lys Lys Glu Arg Phe Leu Gln
 115 120 125

Val Gln Ser Met Met Tyr Asp Leu Met Glu Trp Arg Ser Gln Leu Leu
 130 135 140

Ser Gly Thr Leu Pro Lys Asp Glu Leu Lys Glu Leu Lys Gln Lys Val
 145 150 155 160

Thr Ser Lys Ile Asp Tyr Gly Asn Lys Ile Leu Glu Leu Asp Leu Ile
 165 170 175

Val Arg Asp Glu Asp Gly Asn Ile Leu Asp Pro Asp Asn Thr Ser Val
 180 185 190

Ile Ser Leu Phe His Ala His Glu Glu Ala Thr Asp Lys Ile Thr Glu
 195 200 205

Arg Ile Lys Glu Glu Met Ser Lys Asp Gln Pro Asp Tyr Ala Met Tyr
 210 215 220

Ser Arg Ile Ser Ser Ser Pro Thr His Ser Leu Tyr Val Phe Val Arg
 225 230 235 240

Asn Phe Val Cys Arg Ile Gly Glu Asp Ala Glu Leu Phe Met Ser Leu
 245 250 255

Tyr Asp Pro Asn Lys Gln Thr Val Ile Ser Glu Asn Tyr Leu Val Arg
 260 265 270

Trp Gly Ser Arg Gly Phe Pro Lys Glu Ile Glu Met Leu Asn Asn Leu
 275 280 285

Lys Val Val Phe Thr Asp Leu Gly Asn Lys Asp Leu Asn Arg Asp Lys
 290 295 300

Ile Tyr Leu Ile Cys Gln Ile Val Arg Val Gly Lys Met Asp Leu Lys
 305 310 315 320

Asp Thr Gly Ala Lys Lys Cys Thr Gln Gly Leu Arg Arg Pro Phe Gly
 325 330 335

Val Ala Val Met Asp Ile Thr Asp Ile Ile Lys Gly Lys Ala Glu Ser
 340 345 350

Asp Glu Glu Lys Gln His Phe Ile Pro Phe His Pro Val Thr Ala Glu
 355 360 365

Asn Asp Phe Leu His Ser Leu Leu Gly Lys Val Ile Ala Ser Lys Gly
 370 375 380

Asp Ser Gly Gly Gln Gly Leu Trp Val Thr Met Lys Met Leu Val Gly
 385 390 395 400

Asp Ile Ile Gln Ile Arg Lys Asp Tyr Pro His Leu Val Asp Arg Thr
 405 410 415

Thr Val Val Ala Arg Lys Leu Gly Phe Pro Glu Ile Ile Met Pro Gly
 420 425 430

Asp Val Arg Asn Asp Ile Tyr Ile Thr Leu Leu Gln Gly Asp Phe Asp
 435 440 445

Lys Tyr Asn Lys Thr Thr Gln Arg Asn Val Glu Val Ile Met Cys Val
 450 455 460

Cys Ala Glu Asp Gly Lys Thr Leu Pro Asn Ala Ile Cys Val Gly Ala
 465 470 475 480

Gly Asp Lys Pro Met Asn Glu Tyr Arg Ser Val Val Tyr Tyr Gln Val
 485 490 495

Lys Gln Pro Arg Trp Met Glu Thr Val Lys Val Ala Val Pro Ile Glu
 500 505 510

Asp Met Gln Arg Ile His Leu Arg Phe Met Phe Arg His Arg Ser Ser
 515 520 525

Leu Glu Ser Lys Asp Lys Gly Glu Lys Asn Phe Ala Met Ser Tyr Val
 530 535 540

Lys Leu Met Lys Glu Asp Gly Thr Thr Leu His Asp Gly Phe His Asp
 545 550 555 560

Leu Val Val Leu Lys Gly Asp Ser Lys Lys Met Glu Asp Ala Ser Ala
 565 570 575

Tyr Leu Thr Leu Pro Ser Tyr Arg His His Val Glu Asn Lys Gly Ala
 580 585 590

Thr Leu Ser Arg Ser Ser Ser Ser Val Gly Gly Leu Ser Val Ser Ser
 595 600 605

Arg Asp Val Phe Ser Ile Ser Thr Leu Val Cys Ser Thr Lys Leu Thr
610 615 620

Gln Asn Val Gly Leu Leu Gly Leu Leu Lys Trp Arg Met Lys Pro Gln
625 630 635 640

Leu Leu Gln Glu Asn Leu Glu Lys Leu Lys Ile Val Asp Gly Glu Glu
645 650 655

Val Val Lys Phe Leu Gln Asp Thr Leu Asp Ala Leu Phe Asn Ile Met
660 665 670

Met Glu His Ser Gln Ser Asp Glu Tyr Asp Ile Leu Val Phe Asp Ala
675 680 685

Leu Ile Tyr Ile Ile Gly Leu Ile Ala Asp Arg Lys Phe Gln His Phe
690 695 700

Asn Thr Val Leu Glu Ala Tyr Ile Gln Gln His Phe Ser Ala Thr Leu
705 710 715 720

Ala Tyr Lys Lys Leu Met Thr Val Leu Lys Thr Tyr Leu Asp Thr Ser
725 730 735

Ser Arg Gly Glu Gln Cys Glu Pro Ile Leu Arg Thr Leu Lys Ala Leu
740 745 750

Glu Tyr Val Phe Lys Phe Ile Val Arg Ser Arg Thr Leu Phe Ser Gln
755 760 765

Leu Tyr Glu Gly Lys Glu Gln Met Glu Phe Glu Glu Ser Met Arg Arg
770 775 780

Leu Phe Glu Ser Ile Asn Asn Leu Met Lys Ser Gln Tyr Lys Thr Thr
785 790 795 800

Ile Leu Leu Gln Val Ala Ala Leu Lys Tyr Ile Pro Ser Val Leu His
805 810 815

Asp Val Glu Met Val Phe Asp Ala Lys Leu Leu Ser Gln Leu Leu Tyr
820 825 830

Glu Phe Tyr Thr Cys Ile Pro Pro Val Lys Leu Gln Lys Gln Lys Val
835 840 845

Gln Ser Met Asn Glu Ile Val Gln Ser Asn Leu Phe Lys Lys Gln Glu

850

855

860

Cys Arg Asp Ile Leu Leu Pro Val Ile Thr Lys Glu Leu Lys Glu Leu
 865 870 875 880

Leu Glu Gln Lys Asp Asp Met Gln His Gln Val Leu Glu Arg Lys Tyr
 885 890 895

Cys Val Glu Leu Leu Asn Ser Ile Leu Glu Val Leu Ser Tyr Gln Asp
 900 905 910

Ala Ala Phe Thr Tyr His His Ile Gln Glu Ile Met Val Gln Leu Leu
 915 920 925

Arg Thr Val Asn Arg Thr Val Ile Thr Met Gly Arg Asp His Ile Leu
 930 935 940

Ile Ser His Phe Val Ala Cys Met Thr Ala Ile Leu Asn Gln Met Gly
 945 950 955 960

Asp Gln His Tyr Ser Phe Tyr Ile Glu Thr Phe Gln Thr Ser Ser Glu
 965 970 975

Leu Val Asp Phe Leu Met Glu Thr Phe Ile Met Phe Lys Asp Leu Ile
 980 985 990

Gly Lys Asn Val Tyr Pro Gly Asp Trp Met Ala Met Ser Met Val Gln
 995 1000 1005

Asn Arg Val Phe Leu Arg Ala Ile Asn Lys Phe Ala Glu Thr Met
 1010 1015 1020

Asn Gln Lys Phe Leu Glu His Thr Asn Phe Glu Phe Gln Leu Trp
 1025 1030 1035

Asn Asn Tyr Phe His Leu Ala Val Ala Phe Ile Thr Gln Asp Ser
 1040 1045 1050

Leu Gln Leu Glu Gln Phe Ser His Ala Lys Tyr Asn Lys Ile Leu
 1055 1060 1065

Asn Lys Tyr Gly Asp Met Arg Arg Leu Ile Gly Phe Ser Ile Arg
 1070 1075 1080

Asp Met Trp Tyr Lys Leu Gly Gln Asn Lys Ile Cys Phe Ile Pro
 1085 1090 1095

Gly	Met	Val	Gly	Pro	Ile	Leu	Glu	Met	Thr	Leu	Ile	Pro	Glu	Ala
1100						1105					1110			
Glu	Leu	Arg	Lys	Ala	Thr	Ile	Pro	Ile	Phe	Phe	Asp	Met	Met	Leu
1115						1120					1125			
Cys	Glu	Tyr	Gln	Arg	Ser	Gly	Asp	Phe	Lys	Lys	Phe	Glu	Asn	Glu
1130						1135					1140			
Ile	Ile	Leu	Lys	Leu	Asp	His	Glu	Val	Glu	Gly	Gly	Arg	Gly	Asp
1145						1150					1155			
Glu	Gln	Tyr	Met	Gln	Leu	Leu	Glu	Ser	Ile	Leu	Met	Glu	Cys	Ala
1160						1165					1170			
Ala	Glu	His	Pro	Thr	Ile	Ala	Lys	Ser	Val	Glu	Asn	Phe	Val	Asn
1175						1180					1185			
Leu	Val	Lys	Gly	Leu	Leu	Glu	Lys	Leu	Leu	Asp	Tyr	Arg	Gly	Val
1190						1195					1200			
Met	Thr	Asp	Glu	Ser	Lys	Asp	Asn	Arg	Met	Ser	Cys	Thr	Val	Asn
1205						1210					1215			
Leu	Leu	Asn	Phe	Tyr	Lys	Asp	Asn	Asn	Arg	Glu	Glu	Met	Tyr	Ile
1220						1225					1230			
Arg	Tyr	Leu	Tyr	Lys	Leu	Arg	Asp	Leu	His	Leu	Asp	Cys	Asp	Asn
1235						1240					1245			
Tyr	Thr	Glu	Ala	Ala	Tyr	Thr	Leu	Leu	Leu	His	Thr	Trp	Leu	Leu
1250						1255					1260			
Lys	Trp	Ser	Asp	Glu	Gln	Cys	Ala	Ser	Gln	Val	Met	Gln	Thr	Gly
1265						1270					1275			
Gln	Gln	His	Pro	Gln	Thr	His	Arg	Gln	Leu	Lys	Glu	Thr	Leu	Tyr
1280						1285					1290			
Glu	Thr	Ile	Ile	Gly	Tyr	Phe	Asp	Lys	Gly	Lys	Met	Trp	Glu	Glu
1295						1300					1305			
Ala	Ile	Ser	Leu	Cys	Lys	Glu	Leu	Ala	Glu	Gln	Tyr	Glu	Met	Glu
1310						1315					1320			

Ile	Phe	Asp	Tyr	Glu	Leu	Leu	Ser	Gln	Asn	Leu	Ile	Gln	Gln	Ala
1325						1330					1335			
Lys	Phe	Tyr	Glu	Ser	Ile	Met	Lys	Ile	Leu	Arg	Pro	Lys	Pro	Asp
1340						1345					1350			
Tyr	Phe	Ala	Val	Gly	Tyr	Tyr	Gly	Gln	Gly	Phe	Pro	Ser	Phe	Leu
1355						1360					1365			
Arg	Asn	Lys	Val	Phe	Ile	Tyr	Arg	Gly	Lys	Glu	Tyr	Glu	Arg	Arg
1370						1375					1380			
Glu	Asp	Phe	Gln	Met	Gln	Leu	Met	Thr	Gln	Phe	Pro	Asn	Ala	Glu
1385						1390					1395			
Lys	Met	Asn	Thr	Thr	Ser	Ala	Pro	Gly	Asp	Asp	Val	Lys	Asn	Ala
1400						1405					1410			
Pro	Gly	Gln	Tyr	Ile	Gln	Cys	Phe	Thr	Val	Gln	Pro	Val	Leu	Asp
1415						1420					1425			
Glu	His	Pro	Arg	Phe	Lys	Asn	Lys	Pro	Val	Pro	Asp	Gln	Ile	Ile
1430						1435					1440			
Asn	Phe	Tyr	Lys	Ser	Asn	Tyr	Val	Gln	Arg	Phe	His	Tyr	Ser	Arg
1445						1450					1455			
Pro	Val	Arg	Arg	Gly	Thr	Val	Asp	Pro	Glu	Asn	Glu	Phe	Ala	Ser
1460						1465					1470			
Met	Trp	Ile	Glu	Arg	Thr	Ser	Phe	Val	Thr	Ala	Tyr	Lys	Leu	Pro
1475						1480					1485			
Gly	Ile	Leu	Arg	Trp	Phe	Glu	Val	Val	His	Met	Ser	Gln	Thr	Thr
1490						1495					1500			
Ile	Ser	Pro	Leu	Glu	Asn	Ala	Ile	Glu	Thr	Met	Ser	Thr	Ala	Asn
1505						1510					1515			
Glu	Lys	Ile	Leu	Met	Met	Ile	Asn	Gln	Tyr	Gln	Ser	Asp	Glu	Thr
1520						1525					1530			
Leu	Pro	Ile	Asn	Pro	Leu	Ser	Met	Leu	Leu	Asn	Gly	Ile	Val	Asp
1535						1540					1545			

Pro Ala Val Met Gly Gly Phe Ala Lys Tyr Glu Lys Ala Phe Phe
 1550 1555 1560

 Thr Glu Glu Tyr Val Arg Asp His Pro Glu Asp Gln Asp Lys Leu
 1565 1570 1575

 Thr His Leu Lys Asp Leu Ile Ala Trp Gln Ile Pro Phe Leu Gly
 1580 1585 1590

 Ala Gly Ile Lys Ile His Glu Lys Arg Val Ser Asp Asn Leu Arg
 1595 1600 1605

 Pro Phe His Asp Arg Met Glu Glu Cys Phe Lys Asn Leu Lys Met
 1610 1615 1620

 Lys Val Glu Lys Glu Tyr Gly Val Arg Glu Met Pro Asp Phe Asp
 1625 1630 1635

 Asp Arg Arg Val Gly Arg Pro Arg Ser Met Leu Arg Ser Tyr Arg
 1640 1645 1650

 Gln Met Ser Ile Ile Ser Leu Ala Ser Met Asn Ser Asp Cys Ser
 1655 1660 1665

 Thr Pro Ser Lys Pro Thr Ser Glu Ser Phe Asp Leu Glu Leu Ala
 1670 1675 1680

 Ser Pro Lys Thr Pro Arg Val Glu Gln Glu Glu Pro Ile Ser Pro
 1685 1690 1695

 Gly Ser Thr Leu Pro Glu Val Lys Leu Arg Arg Ser Lys Lys Arg
 1700 1705 1710

 Thr Lys Arg Ser Ser Val Val Phe Ala Asp Glu Lys Ala Ala Ala
 1715 1720 1725

 Glu Ser Asp Leu Lys Arg Leu Ser Arg Lys His Glu Phe Met Ser
 1730 1735 1740

 Asp Thr Asn Leu Ser Glu His Ala Ala Ile Pro Leu Lys Ala Ser
 1745 1750 1755

 Val Leu Ser Gln Met Ser Phe Ala Ser Gln Ser Met Pro Thr Ile
 1760 1765 1770

 Pro Ala Leu Ala Leu Ser Val Ala Gly Ile Pro Gly Leu Asp Glu

1775

1780

1785

Ala Asn Thr Ser Pro Arg Leu Ser Gln Thr Phe Leu Gln Leu Ser
 1790 1795 1800

Asp Gly Asp Lys Lys Thr Leu Thr Arg Lys Lys Val Asn Gln Phe
 1805 1810 1815

Phe Lys Thr Met Leu Ala Ser Lys Ser Ala Glu Glu Gly Lys Gln
 1820 1825 1830

Ile Pro Asp Ser Leu Ser Thr Asp Leu
 1835 1840

<210> 2930

<211> 386

<212> PRT

<213> Homo sapiens

<400> 2930

Met Glu Glu Leu Asp Ala Leu Leu Glu Glu Leu Glu Arg Ser Thr Leu
 1 5 10 15

Gln Asp Ser Asp Glu Tyr Ser Asn Pro Ala Pro Leu Pro Leu Asp Gln
 20 25 30

His Ser Arg Lys Glu Thr Asn Leu Asp Glu Thr Ser Glu Ile Leu Ser
 35 40 45

Ile Gln Asp Asn Thr Ser Pro Leu Pro Ala Gln Leu Val Tyr Thr Thr
 50 55 60

Asn Ile Gln Glu Leu Asn Val Tyr Ser Glu Ala Gln Glu Pro Lys Glu
 65 70 75 80

Ser Pro Pro Pro Ser Lys Thr Ser Ala Ala Ala Gln Leu Asp Glu Leu
 85 90 95

Met Ala His Leu Thr Glu Met Gln Ala Lys Val Ala Val Arg Ala Asp
 100 105 110

Ala Gly Lys Lys His Leu Pro Asp Lys Gln Asp His Lys Ala Ser Leu
 115 120 125

Asp Ser Met Leu Gly Gly Leu Glu Gln Glu Leu Gln Asp Leu Gly Ile
 130 135 140

Ala Thr Val Pro Lys Gly His Cys Ala Ser Cys Gln Lys Pro Ile Ala
 145 150 155 160

Gly Lys Val Ile His Ala Leu Gly Gln Ser Trp His Pro Glu His Phe
 165 170 175

Val Cys Thr His Cys Lys Glu Glu Ile Gly Ser Ser Pro Phe Phe Glu
 180 185 190

Arg Ser Gly Leu Ala Tyr Cys Pro Asn Asp Tyr His Gln Leu Phe Ser
 195 200 205

Pro Arg Cys Ala Tyr Cys Ala Ala Pro Ile Leu Asp Lys Val Leu Thr
 210 215 220

Ala Met Asn Gln Thr Trp His Pro Glu His Phe Phe Cys Ser His Cys
 225 230 235 240

Gly Glu Val Phe Gly Ala Glu Gly Phe His Glu Lys Asp Lys Lys Pro
 245 250 255

Tyr Cys Arg Lys Asp Phe Leu Ala Met Phe Ser Pro Lys Cys Gly Gly
 260 265 270

Cys Asn Arg Pro Val Leu Glu Asn Tyr Leu Ser Ala Met Asp Thr Val
 275 280 285

Trp His Pro Glu Cys Phe Val Cys Gly Asp Cys Phe Thr Ser Phe Ser
 290 295 300

Thr Gly Ser Phe Phe Glu Leu Asp Gly Arg Pro Phe Cys Glu Leu His
 305 310 315 320

Tyr His His Arg Arg Gly Thr Leu Cys His Gly Cys Gly Gln Pro Ile
 325 330 335

Thr Gly Arg Cys Ile Ser Ala Met Gly Tyr Lys Phe His Pro Glu His
 340 345 350

Phe Val Cys Ala Phe Cys Leu Thr Gln Leu Ser Lys Gly Ile Phe Arg
 355 360 365

Glu Gln Asn Asp Lys Thr Tyr Cys Gln Pro Cys Phe Asn Lys Leu Phe
 370 375 380

Pro Leu
385

<210> 2931
<211> 368
<212> PRT
<213> Homo sapiens

<400> 2931

Met Val Leu Glu Val Ser Asp His Gln Val Leu Asn Asp Ala Glu Val
1 5 10 15

Ala Ala Leu Leu Glu Asn Phe Ser Ser Ser Tyr Asp Tyr Gly Glu Asn
20 25 30

Glu Ser Asp Ser Cys Cys Thr Ser Pro Pro Cys Pro Gln Asp Phe Ser
35 40 45

Leu Asn Phe Asp Arg Ala Phe Leu Pro Ala Leu Tyr Ser Leu Leu Phe
50 55 60

Leu Leu Gly Leu Leu Gly Asn Gly Ala Val Ala Ala Val Leu Leu Ser
65 70 75 80

Arg Arg Thr Ala Leu Ser Ser Thr Asp Thr Phe Leu Leu His Leu Ala
85 90 95

Val Ala Asp Thr Leu Leu Val Leu Thr Leu Pro Leu Trp Ala Val Asp
100 105 110

Ala Ala Val Gln Trp Val Phe Gly Ser Gly Leu Cys Lys Val Ala Gly
115 120 125

Ala Leu Phe Asn Ile Asn Phe Tyr Ala Gly Ala Leu Leu Leu Ala Cys
130 135 140

Ile Ser Phe Asp Arg Tyr Leu Asn Ile Val His Ala Thr Gln Leu Tyr
145 150 155 160

Arg Arg Gly Pro Pro Ala Arg Val Thr Leu Thr Cys Leu Ala Val Trp
165 170 175

Gly Leu Cys Leu Leu Phe Ala Leu Pro Asp Phe Ile Phe Leu Ser Ala
180 185 190

His His Asp Glu Arg Leu Asn Ala Thr His Cys Gln Tyr Asn Phe Pro
195 200 205

Gln Val Gly Arg Thr Ala Leu Arg Val Leu Gln Leu Val Ala Gly Phe
 210 215 220

Leu Leu Pro Leu Leu Val Met Ala Tyr Cys Tyr Ala His Ile Leu Ala
 225 230 235 240

Val Leu Leu Val Ser Arg Gly Gln Arg Arg Leu Arg Ala Met Arg Leu
 245 250 255

Val Val Val Val Val Val Ala Phe Ala Leu Cys Trp Thr Pro Tyr His
 260 265 270

Leu Val Val Leu Val Asp Ile Leu Met Asp Leu Gly Ala Leu Ala Arg
 275 280 285

Asn Cys Gly Arg Glu Ser Arg Val Asp Val Ala Lys Ser Val Thr Ser
 290 295 300

Gly Leu Gly Tyr Met His Cys Cys Leu Asn Pro Leu Leu Tyr Ala Phe
 305 310 315 320

Val Gly Val Lys Phe Arg Glu Arg Met Trp Met Leu Leu Leu Arg Leu
 325 330 335

Gly Cys Pro Asn Gln Arg Gly Leu Gln Arg Gln Pro Ser Ser Ser Arg
 340 345 350

Arg Asp Ser Ser Trp Ser Glu Thr Ser Glu Ala Ser Tyr Ser Gly Leu
 355 360 365

<210> 2932

<211> 359

<212> PRT

<213> Homo sapiens

<400> 2932

Met Ala Glu Ala Ile Thr Tyr Ala Asp Leu Arg Phe Val Lys Ala Pro
 1 5 10 15

Leu Lys Lys Ser Ile Ser Ser Arg Leu Gly Gln Asp Pro Gly Ala Asp
 20 25 30

Asp Asp Gly Glu Ile Thr Tyr Glu Asn Val Gln Val Pro Ala Val Leu
 35 40 45

Gly Val Pro Ser Ser Leu Ala Ser Ser Val Leu Gly Asp Lys Ala Ala
50 55 60

Val Lys Ser Glu Gln Pro Thr Ala Ser Trp Arg Ala Val Thr Ser Pro
65 70 75 80

Ala Val Gly Arg Ile Leu Pro Cys Arg Thr Thr Cys Leu Arg Tyr Leu
85 90 95

Leu Leu Gly Leu Leu Leu Thr Cys Leu Leu Leu Gly Val Thr Ala Ile
100 105 110

Cys Leu Gly Val Arg Tyr Leu Gln Val Ser Gln Gln Leu Gln Gln Thr
115 120 125

Asn Arg Val Leu Glu Val Thr Asn Ser Ser Leu Arg Gln Gln Leu Arg
130 135 140

Leu Lys Ile Thr Gln Leu Gly Gln Ser Ala Glu Asp Leu Gln Gly Ser
145 150 155 160

Arg Arg Glu Leu Ala Gln Ser Gln Glu Ala Leu Gln Val Glu Gln Arg
165 170 175

Ala His Gln Ala Ala Glu Gly Gln Leu Gln Ala Cys Gln Ala Asp Arg
180 185 190

Gln Lys Thr Lys Glu Thr Leu Gln Ser Glu Glu Gln Gln Arg Arg Ala
195 200 205

Leu Glu Gln Lys Leu Ser Asn Met Glu Asn Arg Leu Lys Pro Phe Phe
210 215 220

Thr Cys Gly Ser Ala Asp Thr Cys Cys Pro Ser Gly Trp Ile Met His
225 230 235 240

Gln Lys Ser Cys Phe Tyr Ile Ser Leu Thr Ser Lys Asn Trp Gln Glu
245 250 255

Ser Gln Lys Gln Cys Glu Thr Leu Ser Ser Lys Leu Ala Thr Phe Ser
260 265 270

Glu Ile Tyr Pro Gln Ser His Ser Tyr Tyr Phe Leu Asn Ser Leu Leu
275 280 285

Pro Asn Gly Gly Ser Gly Asn Ser Tyr Trp Thr Gly Leu Ser Ser Asn

290

295

300

Lys Asp Trp Lys Leu Thr Asp Asp Thr Gln Arg Thr Arg Thr Tyr Ala
 305 310 315 320

Gln Ser Ser Lys Cys Asn Lys Val His Lys Thr Trp Ser Trp Trp Thr
 325 330 335

Leu Glu Ser Glu Ser Cys Arg Ser Ser Leu Pro Tyr Ile Cys Glu Met
 340 345 350

Thr Ala Phe Arg Phe Pro Asp
 355

<210> 2933
 <211> 266
 <212> PRT
 <213> Homo sapiens

<400> 2933

Met Arg Val Thr Leu Ala Thr Ile Ala Trp Met Val Ser Phe Val Ser
 1 5 10 15

Asn Tyr Ser His Thr Ala Asn Ile Leu Pro Asp Ile Glu Asn Glu Asp
 20 25 30

Phe Ile Lys Asp Cys Val Arg Ile His Asn Lys Phe Arg Ser Glu Val
 35 40 45

Lys Pro Thr Ala Ser Asp Met Leu Tyr Met Thr Trp Asp Pro Ala Leu
 50 55 60

Ala Gln Ile Ala Lys Ala Trp Ala Ser Asn Cys Gln Phe Ser His Asn
 65 70 75 80

Thr Arg Leu Lys Pro Pro His Lys Leu His Pro Asn Phe Thr Ser Leu
 85 90 95

Gly Glu Asn Ile Trp Thr Gly Ser Val Pro Ile Phe Ser Val Ser Ser
 100 105 110

Ala Ile Thr Asn Trp Tyr Asp Glu Ile Gln Asp Tyr Asp Phe Lys Thr
 115 120 125

Arg Ile Cys Lys Lys Val Cys Gly His Tyr Thr Gln Val Val Trp Ala
 130 135 140

Asp Ser Tyr Lys Val Gly Cys Ala Val Gln Phe Cys Pro Lys Val Ser
145 150 155 160

Gly Phe Asp Ala Leu Ser Asn Gly Ala His Phe Ile Cys Asn Tyr Gly
165 170 175

Pro Gly Gly Asn Tyr Pro Thr Trp Pro Tyr Lys Arg Gly Ala Thr Cys
180 185 190

Ser Ala Cys Pro Asn Asn Asp Lys Cys Leu Asp Asn Leu Cys Val Asn
195 200 205

Arg Gln Arg Asp Gln Val Lys Arg Tyr Tyr Ser Val Val Tyr Pro Gly
210 215 220

Trp Pro Ile Tyr Pro Arg Asn Arg Tyr Thr Ser Leu Phe Leu Ile Val
225 230 235 240

Asn Ser Val Ile Leu Ile Leu Ser Val Ile Ile Thr Ile Leu Val Gln
245 250 255

Leu Lys Tyr Pro Asn Leu Val Leu Leu Asp
260 265

<210> 2934
<211> 1429
<212> PRT
<213> Homo sapiens

<400> 2934

Met Ala Gly Gly Ala Trp Gly Arg Leu Ala Cys Tyr Leu Glu Phe Leu
1 5 10 15

Lys Lys Glu Glu Leu Lys Glu Phe Gln Leu Leu Leu Ala Asn Lys Ala
20 25 30

His Ser Arg Ser Ser Ser Gly Glu Thr Pro Ala Gln Pro Glu Lys Thr
35 40 45

Ser Gly Met Glu Val Ala Ser Tyr Leu Val Ala Gln Tyr Gly Glu Gln
50 55 60

Arg Ala Trp Asp Leu Ala Leu His Thr Trp Glu Gln Met Gly Leu Arg
65 70 75 80

Ser Leu Cys Ala Gln Ala Gln Glu Gly Ala Gly His Ser Pro Ser Phe

85

90

95

Pro Tyr Ser Pro Ser Glu Pro His Leu Gly Ser Pro Ser Gln Pro Thr
 100 105 110

Ser Thr Ala Val Leu Met Pro Trp Ile His Glu Leu Pro Ala Gly Cys
 115 120 125

Thr Gln Gly Ser Glu Arg Arg Val Leu Arg Gln Leu Pro Asp Thr Ser
 130 135 140

Gly Arg Arg Trp Arg Glu Ile Ser Ala Ser Leu Leu Tyr Gln Ala Leu
 145 150 155 160

Pro Ser Ser Pro Asp His Glu Ser Pro Ser Gln Glu Ser Pro Asn Ala
 165 170 175

Pro Thr Ser Thr Ala Val Leu Gly Ser Trp Gly Ser Pro Pro Gln Pro
 180 185 190

Ser Leu Ala Pro Arg Glu Gln Glu Ala Pro Gly Thr Gln Trp Pro Leu
 195 200 205

Asp Glu Thr Ser Gly Ile Tyr Tyr Thr Glu Ile Arg Glu Arg Glu Arg
 210 215 220

Glu Lys Ser Glu Lys Gly Arg Pro Pro Trp Ala Ala Val Val Gly Thr
 225 230 235 240

Pro Pro Gln Ala His Thr Ser Leu Gln Pro His His His Pro Trp Glu
 245 250 255

Pro Ser Val Arg Glu Ser Leu Cys Ser Thr Trp Pro Trp Lys Asn Glu
 260 265 270

Asp Phe Asn Gln Lys Phe Thr Gln Leu Leu Leu Leu Gln Arg Pro His
 275 280 285

Pro Arg Ser Gln Asp Pro Leu Val Lys Arg Ser Trp Pro Asp Tyr Val
 290 295 300

Glu Glu Asn Arg Gly His Leu Ile Glu Ile Arg Asp Leu Phe Gly Pro
 305 310 315 320

Gly Leu Asp Thr Gln Glu Pro Arg Ile Val Ile Leu Gln Gly Ala Ala
 325 330 335

Gly Ile Gly Lys Ser Thr Leu Ala Arg Gln Val Lys Glu Ala Trp Gly
 340 345 350

Arg Gly Gln Leu Tyr Gly Asp Arg Phe Gln His Val Phe Tyr Phe Ser
 355 360 365

Cys Arg Glu Leu Ala Gln Ser Lys Val Val Ser Leu Ala Glu Leu Ile
 370 375 380

Gly Lys Asp Gly Thr Ala Thr Pro Ala Pro Ile Arg Gln Ile Leu Ser
 385 390 395 400

Arg Pro Glu Arg Leu Leu Phe Ile Leu Asp Gly Val Asp Glu Pro Gly
 405 410 415

Trp Val Leu Gln Glu Pro Ser Ser Glu Leu Cys Leu His Trp Ser Gln
 420 425 430

Pro Gln Pro Ala Asp Ala Leu Leu Gly Ser Leu Leu Gly Lys Thr Ile
 435 440 445

Leu Pro Glu Ala Ser Phe Leu Ile Thr Ala Arg Thr Thr Ala Leu Gln
 450 455 460

Asn Leu Ile Pro Ser Leu Glu Gln Ala Arg Trp Val Glu Val Leu Gly
 465 470 475 480

Phe Ser Glu Ser Ser Arg Lys Glu Tyr Phe Tyr Arg Tyr Phe Thr Asp
 485 490 495

Glu Arg Gln Ala Ile Arg Ala Phe Arg Leu Val Lys Ser Asn Lys Glu
 500 505 510

Leu Trp Ala Leu Cys Leu Val Pro Trp Val Ser Trp Leu Ala Cys Thr
 515 520 525

Cys Leu Met Gln Gln Met Lys Arg Lys Glu Lys Leu Thr Leu Thr Ser
 530 535 540

Lys Thr Thr Thr Thr Leu Cys Leu His Tyr Leu Ala Gln Ala Leu Gln
 545 550 555 560

Ala Gln Pro Leu Gly Pro Gln Leu Arg Asp Leu Cys Ser Leu Ala Ala
 565 570 575

Glu Gly Ile Trp Gln Lys Lys Thr Leu Phe Ser Pro Asp Asp Leu Arg
 580 585 590

Lys His Gly Leu Asp Gly Ala Ile Ile Ser Thr Phe Leu Lys Met Gly
 595 600 605

Ile Leu Gln Glu His Pro Ile Pro Leu Ser Tyr Ser Phe Ile His Leu
 610 615 620

Cys Phe Gln Glu Phe Phe Ala Ala Met Ser Tyr Val Leu Glu Asp Glu
 625 630 635 640

Lys Gly Arg Gly Lys His Ser Asn Cys Ile Ile Asp Leu Glu Lys Thr
 645 650 655

Leu Glu Ala Tyr Gly Ile His Gly Leu Phe Gly Ala Ser Thr Thr Arg
 660 665 670

Phe Leu Leu Gly Leu Leu Ser Asp Glu Gly Glu Arg Glu Met Glu Asn
 675 680 685

Ile Phe His Cys Arg Leu Ser Gln Gly Arg Asn Leu Met Gln Trp Val
 690 695 700

Pro Ser Leu Gln Leu Leu Leu Gln Pro His Ser Leu Glu Ser Leu His
 705 710 715 720

Cys Leu Tyr Glu Thr Arg Asn Lys Thr Phe Leu Thr Gln Val Met Ala
 725 730 735

His Phe Glu Glu Met Gly Met Cys Val Glu Thr Asp Met Glu Leu Leu
 740 745 750

Val Cys Thr Phe Cys Ile Lys Phe Ser Arg His Val Lys Lys Leu Gln
 755 760 765

Leu Ile Glu Gly Arg Gln His Arg Ser Thr Trp Ser Pro Thr Met Val
 770 775 780

Val Leu Phe Arg Trp Val Pro Val Thr Asp Ala Tyr Trp Gln Ile Leu
 785 790 795 800

Phe Ser Val Leu Lys Val Thr Arg Asn Leu Lys Glu Leu Asp Leu Ser
 805 810 815

Gly Asn Ser Leu Ser His Ser Ala Val Lys Ser Leu Cys Lys Thr Leu
 820 825 830

Arg Arg Pro Arg Cys Leu Leu Glu Thr Leu Arg Leu Ala Gly Cys Gly
 835 840 845

Leu Thr Ala Glu Asp Cys Lys Asp Leu Ala Phe Gly Leu Arg Ala Asn
 850 855 860

Gln Thr Leu Thr Glu Leu Asp Leu Ser Phe Asn Val Leu Thr Asp Ala
 865 870 875 880

Gly Ala Lys His Leu Cys Gln Arg Leu Arg Gln Pro Ser Cys Lys Leu
 885 890 895

Gln Arg Leu Gln Leu Val Ser Cys Gly Leu Thr Ser Asp Cys Cys Gln
 900 905 910

Asp Leu Ala Ser Val Leu Ser Ala Ser Pro Ser Leu Lys Glu Leu Asp
 915 920 925

Leu Gln Gln Asn Asn Leu Asp Asp Val Gly Val Arg Leu Leu Cys Glu
 930 935 940

Gly Leu Arg His Pro Ala Cys Lys Leu Ile Arg Leu Gly Leu Asp Gln
 945 950 955 960

Thr Thr Leu Ser Asp Glu Met Arg Gln Glu Leu Arg Ala Leu Glu Gln
 965 970 975

Glu Lys Pro Gln Leu Leu Ile Phe Ser Arg Arg Lys Pro Ser Val Met
 980 985 990

Thr Pro Thr Glu Gly Leu Asp Thr Gly Glu Met Ser Asn Ser Thr Ser
 995 1000 1005

Ser Leu Lys Arg Gln Arg Leu Gly Ser Glu Arg Ala Ala Ser His
 1010 1015 1020

Val Ala Gln Ala Asn Leu Lys Leu Leu Asp Val Ser Lys Ile Phe
 1025 1030 1035

Pro Ile Ala Glu Ile Ala Glu Glu Ser Ser Pro Glu Val Val Pro
 1040 1045 1050

Val Glu Leu Leu Cys Val Pro Ser Pro Ala Ser Gln Gly Asp Leu

1055		1060		1065
His Thr Lys Pro Leu Gly Thr Asp Asp Asp Phe Trp Gly Pro Thr				
1070		1075		1080
Gly Pro Val Ala Thr Glu Val Val Asp Lys Glu Lys Asn Leu Tyr				
1085		1090		1095
Arg Val His Phe Pro Val Ala Gly Ser Tyr Arg Trp Pro Asn Thr				
1100		1105		1110
Gly Leu Cys Phe Val Met Arg Glu Ala Val Thr Val Glu Ile Glu				
1115		1120		1125
Phe Cys Val Trp Asp Gln Phe Leu Gly Glu Ile Asn Pro Gln His				
1130		1135		1140
Ser Trp Met Val Ala Gly Pro Leu Leu Asp Ile Lys Ala Glu Pro				
1145		1150		1155
Gly Ala Val Glu Ala Val His Leu Pro His Phe Val Ala Leu Gln				
1160		1165		1170
Gly Gly His Val Asp Thr Ser Leu Phe Gln Met Ala His Phe Lys				
1175		1180		1185
Glu Glu Gly Met Leu Leu Glu Lys Pro Ala Arg Val Glu Leu His				
1190		1195		1200
His Ile Val Leu Glu Asn Pro Ser Phe Ser Pro Leu Gly Val Leu				
1205		1210		1215
Leu Lys Met Ile His Asn Ala Leu Arg Phe Ile Pro Val Thr Ser				
1220		1225		1230
Val Val Leu Leu Tyr His Arg Val His Pro Glu Glu Val Thr Phe				
1235		1240		1245
His Leu Tyr Leu Ile Pro Ser Asp Cys Ser Ile Arg Lys Glu Leu				
1250		1255		1260
Glu Leu Cys Tyr Arg Ser Pro Gly Glu Asp Gln Leu Phe Ser Glu				
1265		1270		1275
Phe Tyr Val Gly His Leu Gly Ser Gly Ile Arg Leu Gln Val Lys				
1280		1285		1290

Asp Lys Lys Asp Glu Thr Leu Val Trp Glu Ala Leu Val Lys Pro
 1295 1300 1305

Gly Asp Leu Met Pro Ala Thr Thr Leu Ile Pro Pro Ala Arg Ile
 1310 1315 1320

Ala Val Pro Ser Pro Leu Asp Ala Pro Gln Leu Leu His Phe Val
 1325 1330 1335

Asp Gln Tyr Arg Glu Gln Leu Ile Ala Arg Val Thr Ser Val Glu
 1340 1345 1350

Val Val Leu Asp Lys Leu His Gly Gln Val Leu Ser Gln Glu Gln
 1355 1360 1365

Tyr Glu Arg Val Leu Ala Glu Asn Thr Arg Pro Ser Gln Met Arg
 1370 1375 1380

Lys Leu Phe Ser Leu Ser Gln Ser Trp Asp Arg Lys Cys Lys Asp
 1385 1390 1395

Gly Leu Tyr Gln Ala Leu Lys Glu Thr His Pro His Leu Ile Met
 1400 1405 1410

Glu Leu Trp Glu Lys Gly Ser Lys Lys Gly Leu Leu Pro Leu Ser
 1415 1420 1425

Ser

<210> 2935
 <211> 352
 <212> PRT
 <213> Homo sapiens

<400> 2935

Met Glu Gly Ile Ser Ile Tyr Thr Ser Asp Asn Tyr Thr Glu Glu Met
 1 5 10 15

Gly Ser Gly Asp Tyr Asp Ser Met Lys Glu Pro Cys Phe Arg Glu Glu
 20 25 30

Asn Ala Asn Phe Asn Lys Ile Phe Leu Pro Thr Ile Tyr Ser Ile Ile
 35 40 45

Phe Leu Thr Gly Ile Val Gly Asn Gly Leu Val Ile Leu Val Met Gly
50 55 60

Tyr Gln Lys Lys Leu Arg Ser Met Thr Asp Lys Tyr Arg Leu His Leu
65 70 75 80

Ser Val Ala Asp Leu Leu Phe Val Ile Thr Leu Pro Phe Trp Ala Val
85 90 95

Asp Ala Val Ala Asn Trp Tyr Phe Gly Asn Phe Leu Cys Lys Ala Val
100 105 110

His Val Ile Tyr Thr Val Asn Leu Tyr Ser Ser Val Leu Ile Leu Ala
115 120 125

Phe Ile Ser Leu Asp Arg Tyr Leu Ala Ile Val His Ala Thr Asn Ser
130 135 140

Gln Arg Pro Arg Lys Leu Leu Ala Glu Lys Val Val Tyr Val Gly Val
145 150 155 160

Trp Ile Pro Ala Leu Leu Leu Thr Ile Pro Asp Phe Ile Phe Ala Asn
165 170 175

Val Ser Glu Ala Asp Asp Arg Tyr Ile Cys Asp Arg Phe Tyr Pro Asn
180 185 190

Asp Leu Trp Val Val Val Phe Gln Phe Gln His Ile Met Val Gly Leu
195 200 205

Ile Leu Pro Gly Ile Val Ile Leu Ser Cys Tyr Cys Ile Ile Ile Ser
210 215 220

Lys Leu Ser His Ser Lys Gly His Gln Lys Arg Lys Ala Leu Lys Thr
225 230 235 240

Thr Val Ile Leu Ile Leu Ala Phe Phe Ala Cys Trp Leu Pro Tyr Tyr
245 250 255

Ile Gly Ile Ser Ile Asp Ser Phe Ile Leu Leu Glu Ile Ile Lys Gln
260 265 270

Gly Cys Glu Phe Glu Asn Thr Val His Lys Trp Ile Ser Ile Thr Glu
275 280 285

Ala Leu Ala Phe Phe His Cys Cys Leu Asn Pro Ile Leu Tyr Ala Phe

290

295

300

Leu Gly Ala Lys Phe Lys Thr Ser Ala Gln His Ala Leu Thr Ser Val
 305 310 315 320

Ser Arg Gly Ser Ser Leu Lys Ile Leu Ser Lys Gly Lys Arg Gly Gly
 325 330 335

His Ser Ser Val Ser Thr Glu Ser Glu Ser Ser Ser Phe His Ser Ser
 340 345 350

<210> 2936

<211> 248

<212> PRT

<213> Homo sapiens

<400> 2936

Met Leu Ser Thr Val Gly Ser Phe Leu Gln Asp Leu Gln Asn Glu Asp
 1 5 10 15

Lys Gly Ile Lys Thr Ala Ala Ile Phe Thr Ala Asp Gly Asn Met Ile
 20 25 30

Ser Ala Ser Thr Leu Met Asp Ile Leu Leu Met Asn Asp Phe Lys Leu
 35 40 45

Val Ile Asn Lys Ile Ala Tyr Asp Val Gln Cys Pro Lys Arg Glu Lys
 50 55 60

Pro Ser Asn Glu His Thr Ala Glu Met Glu His Met Lys Ser Leu Val
 65 70 75 80

His Arg Leu Phe Thr Ile Leu His Leu Glu Glu Ser Gln Lys Lys Arg
 85 90 95

Glu His His Leu Leu Glu Lys Ile Asp His Leu Lys Glu Gln Leu Gln
 100 105 110

Pro Leu Glu Gln Val Lys Ala Gly Ile Glu Ala His Ser Glu Ala Lys
 115 120 125

Thr Ser Gly Leu Leu Trp Ala Gly Leu Ala Leu Leu Ser Ile Gln Gly
 130 135 140

Gly Ala Leu Ala Trp Leu Thr Trp Trp Val Tyr Ser Trp Asp Ile Met
 145 150 155 160

Glu Pro Val Thr Tyr Phe Ile Thr Phe Ala Asn Ser Met Val Phe Phe
 165 170 175

Ala Tyr Phe Ile Val Thr Arg Gln Asp Tyr Thr Tyr Ser Ala Val Lys
 180 185 190

Ser Arg Gln Phe Leu Gln Phe Phe His Lys Lys Ser Lys Gln Gln His
 195 200 205

Phe Asp Val Gln Gln Tyr Asn Lys Leu Lys Glu Asp Leu Ala Lys Ala
 210 215 220

Lys Glu Ser Leu Lys Gln Ala Arg His Ser Leu Cys Leu Gln Met Gln
 225 230 235 240

Val Glu Glu Leu Asn Glu Lys Asn
 245

<210> 2937
 <211> 790
 <212> PRT
 <213> Homo sapiens

<400> 2937

Met Ala Glu Gln Val Leu Pro Gln Ala Leu Tyr Leu Ser Asn Met Arg
 1 5 10 15

Lys Ala Val Lys Ile Arg Glu Arg Thr Pro Glu Asp Ile Phe Lys Pro
 20 25 30

Thr Asn Gly Ile Ile His His Phe Lys Thr Met His Arg Tyr Thr Leu
 35 40 45

Glu Met Phe Arg Thr Cys Gln Phe Cys Pro Gln Phe Arg Glu Ile Ile
 50 55 60

His Lys Ala Leu Ile Asp Arg Asn Ile Gln Ala Thr Leu Glu Ser Gln
 65 70 75 80

Lys Lys Leu Asn Trp Cys Arg Glu Val Arg Lys Leu Val Ala Leu Lys
 85 90 95

Thr Asn Gly Asp Gly Asn Cys Leu Met His Ala Thr Ser Gln Tyr Met
 100 105 110

Trp Gly Val Gln Asp Thr Asp Leu Val Leu Arg Lys Ala Leu Phe Ser

115	120	125
Thr Leu Lys Glu Thr Asp Thr Arg Asn Phe Lys Phe Arg Trp Gln Leu		
130	135	140
Glu Ser Leu Lys Ser Gln Glu Phe Val Glu Thr Gly Leu Cys Tyr Asp		
145	150	155
Thr Arg Asn Trp Asn Asp Glu Trp Asp Asn Leu Ile Lys Met Ala Ser		
165	170	175
Thr Asp Thr Pro Met Ala Arg Ser Gly Leu Gln Tyr Asn Ser Leu Glu		
180	185	190
Glu Ile His Ile Phe Val Leu Cys Asn Ile Leu Arg Arg Pro Ile Ile		
195	200	205
Val Ile Ser Asp Lys Met Leu Arg Ser Leu Glu Ser Gly Ser Asn Phe		
210	215	220
Ala Pro Leu Lys Val Gly Gly Ile Tyr Leu Pro Leu His Trp Pro Ala		
225	230	235
Gln Glu Cys Tyr Arg Tyr Pro Ile Val Leu Gly Tyr Asp Ser His His		
245	250	255
Phe Val Pro Leu Val Thr Leu Lys Asp Ser Gly Pro Glu Ile Arg Ala		
260	265	270
Val Pro Leu Val Asn Arg Asp Arg Gly Arg Phe Glu Asp Leu Lys Val		
275	280	285
His Phe Leu Thr Asp Pro Glu Asn Glu Met Lys Glu Lys Leu Leu Lys		
290	295	300
Glu Tyr Leu Met Val Ile Glu Ile Pro Val Gln Gly Trp Asp His Gly		
305	310	315
Thr Thr His Leu Ile Asn Ala Ala Lys Leu Asp Glu Ala Asn Leu Pro		
325	330	335
Lys Glu Ile Asn Leu Val Asp Asp Tyr Phe Glu Leu Val Gln His Glu		
340	345	350
Tyr Lys Lys Trp Gln Glu Asn Ser Glu Gln Gly Arg Arg Glu Gly His		
355	360	365

Ala Gln Asn Pro Met Glu Pro Ser Val Pro Gln Leu Ser Leu Met Asp
 370 375 380

Val Lys Cys Glu Thr Pro Asn Cys Pro Phe Phe Met Ser Val Asn Thr
 385 390 395 400

Gln Pro Leu Cys His Glu Cys Ser Glu Arg Arg Gln Lys Asn Gln Asn
 405 410 415

Lys Leu Pro Lys Leu Asn Ser Lys Pro Gly Pro Glu Gly Leu Pro Gly
 420 425 430

Met Ala Leu Gly Ala Ser Arg Gly Glu Ala Tyr Glu Pro Leu Ala Trp
 435 440 445

Asn Pro Glu Glu Ser Thr Gly Gly Pro His Ser Ala Pro Pro Thr Ala
 450 455 460

Pro Ser Pro Phe Leu Phe Ser Glu Thr Thr Ala Met Lys Cys Arg Ser
 465 470 475 480

Pro Gly Cys Pro Phe Thr Leu Asn Val Gln His Asn Gly Phe Cys Glu
 485 490 495

Arg Cys His Asn Ala Arg Gln Leu His Ala Ser His Ala Pro Asp His
 500 505 510

Thr Arg His Leu Asp Pro Gly Lys Cys Gln Ala Cys Leu Gln Asp Val
 515 520 525

Thr Arg Thr Phe Asn Gly Ile Cys Ser Thr Cys Phe Lys Arg Thr Thr
 530 535 540

Ala Glu Ala Ser Ser Ser Leu Ser Thr Ser Leu Pro Pro Ser Cys His
 545 550 555 560

Gln Arg Ser Lys Ser Asp Pro Ser Arg Leu Val Arg Ser Pro Ser Pro
 565 570 575

His Ser Cys His Arg Ala Gly Asn Asp Ala Pro Ala Gly Cys Leu Ser
 580 585 590

Gln Ala Ala Arg Thr Pro Gly Asp Arg Thr Gly Thr Ser Lys Cys Arg
 595 600 605

Lys Ala Gly Cys Val Tyr Phe Gly Thr Pro Glu Asn Lys Gly Phe Cys
610 615 620

Thr Leu Cys Phe Ile Glu Tyr Arg Glu Asn Lys His Phe Ala Ala Ala
625 630 635 640

Ser Gly Lys Val Ser Pro Thr Ala Ser Arg Phe Gln Asn Thr Ile Pro
645 650 655

Cys Leu Gly Arg Glu Cys Gly Thr Leu Gly Ser Thr Met Phe Glu Gly
660 665 670

Tyr Cys Gln Lys Cys Phe Ile Glu Ala Gln Asn Gln Arg Phe His Glu
675 680 685

Ala Lys Arg Thr Glu Glu Gln Leu Arg Ser Ser Gln Arg Arg Asp Val
690 695 700

Pro Arg Thr Thr Gln Ser Thr Ser Arg Pro Lys Cys Ala Arg Ala Ser
705 710 715 720

Cys Lys Asn Ile Leu Ala Cys Arg Ser Glu Glu Leu Cys Met Glu Cys
725 730 735

Gln His Pro Asn Gln Arg Met Gly Pro Gly Ala His Arg Gly Glu Pro
740 745 750

Ala Pro Glu Asp Pro Pro Lys Gln Arg Cys Arg Ala Pro Ala Cys Asp
755 760 765

His Phe Gly Asn Ala Lys Cys Asn Gly Tyr Cys Asn Glu Cys Phe Gln
770 775 780

Phe Lys Gln Met Tyr Gly
785 790

<210> 2938
<211> 206
<212> PRT
<213> Homo sapiens

<400> 2938

Met Ala Leu Pro Cys Thr Leu Gly Leu Gly Met Leu Leu Ala Leu Pro
1 5 10 15

Gly Ala Leu Gly Ser Gly Gly Ser Ala Glu Asp Ser Val Gly Ser Ser

20 25 30
 Ser Val Thr Val Val Leu Leu Leu Leu Leu Leu Leu Leu Ala Thr
 35 40 45
 Gly Leu Ala Leu Ala Trp Arg Arg Leu Ser Arg Asp Ser Gly Gly Tyr
 50 55 60
 Tyr His Pro Ala Arg Leu Gly Ala Ala Leu Trp Gly Arg Thr Arg Arg
 65 70 75 80
 Leu Leu Trp Ala Ser Pro Pro Gly Arg Trp Leu Gln Ala Arg Ala Glu
 85 90 95
 Leu Gly Ser Thr Asp Asn Asp Leu Glu Arg Gln Glu Asp Glu Gln Asp
 100 105 110
 Thr Asp Tyr Asp His Val Ala Asp Gly Gly Leu Gln Ala Asp Pro Gly
 115 120 125
 Glu Gly Glu Gln Gln Cys Gly Glu Ala Ser Ser Pro Glu Gln Val Pro
 130 135 140
 Val Arg Ala Glu Glu Ala Arg Asp Ser Asp Thr Glu Gly Asp Leu Val
 145 150 155 160
 Leu Gly Ser Pro Gly Pro Ala Ser Ala Gly Gly Ser Ala Glu Ala Leu
 165 170 175
 Leu Ser Asp Leu His Ala Phe Ala Gly Ser Ala Ala Trp Asp Asp Ser
 180 185 190
 Ala Arg Ala Ala Gly Gly Gln Gly Leu His Val Thr Ala Leu
 195 200 205
 <210> 2939
 <211> 718
 <212> PRT
 <213> Homo sapiens
 <400> 2939
 Met Ile Val Asp Lys Leu Leu Asp Asp Ser Arg Gly Gly Glu Gly Leu
 1 5 10 15
 Arg Asp Ala Ala Gly Gly Cys Gly Leu Met Thr Ser Pro Leu Asn Leu
 20 25 30

Ser Tyr Phe Tyr Gly Ala Ser Pro Pro Ala Ala Ala Pro Gly Ala Cys
 35 40 45
 Asp Ala Ser Cys Ser Val Leu Gly Pro Ser Ala Pro Gly Ser Pro Gly
 50 55 60
 Ser Asp Ser Ser Asp Phe Ser Ser Ala Ser Ser Val Ser Ser Cys Gly
 65 70 75 80
 Ala Val Glu Ser Arg Ser Arg Gly Gly Ala Arg Ala Glu Arg Gln Pro
 85 90 95
 Val Glu Pro His Met Gly Val Gly Arg Gln Gln Arg Gly Pro Phe Gln
 100 105 110
 Gly Val Arg Val Lys Asn Ser Val Lys Glu Leu Leu Leu His Ile Arg
 115 120 125
 Ser His Lys Gln Lys Ala Ser Gly Gln Ala Val Asp Asp Phe Lys Thr
 130 135 140
 Gln Gly Val Asn Ile Glu Gln Phe Arg Glu Leu Lys Asn Thr Val Ser
 145 150 155 160
 Tyr Ser Gly Lys Arg Lys Gly Pro Asp Ser Leu Ser Asp Gly Pro Ala
 165 170 175
 Cys Lys Arg Pro Ala Leu Leu His Ser Gln Phe Leu Thr Pro Pro Gln
 180 185 190
 Thr Pro Thr Pro Gly Glu Ser Met Glu Asp Val His Leu Asn Glu Pro
 195 200 205
 Lys Gln Glu Ser Ser Ala Asp Leu Leu Gln Asn Ile Ile Asn Ile Lys
 210 215 220
 Asn Glu Cys Ser Pro Val Ser Leu Asn Thr Val Gln Val Ser Trp Leu
 225 230 235 240
 Asn Pro Val Val Val Pro Gln Ser Ser Pro Ala Glu Gln Cys Gln Asp
 245 250 255
 Phe His Gly Gly Gln Val Phe Ser Pro Pro Gln Lys Cys Gln Pro Phe
 260 265 270

Gln Val Arg Gly Ser Gln Gln Met Ile Asp Gln Ala Ser Leu Tyr Gln
 275 280 285

Tyr Ser Pro Gln Asn Gln His Val Glu Gln Gln Pro His Tyr Thr His
 290 295 300

Lys Pro Thr Leu Glu Tyr Ser Pro Phe Pro Ile Pro Pro Gln Ser Pro
 305 310 315 320

Ala Tyr Glu Pro Asn Leu Phe Asp Gly Pro Glu Ser Gln Phe Cys Pro
 325 330 335

Asn Gln Ser Leu Val Ser Leu Leu Gly Asp Gln Arg Glu Ser Glu Asn
 340 345 350

Ile Ala Asn Pro Met Gln Thr Ser Ser Ser Val Gln Gln Gln Asn Asp
 355 360 365

Ala His Leu His Ser Phe Ser Met Met Pro Ser Ser Ala Cys Glu Ala
 370 375 380

Met Val Gly His Glu Met Ala Ser Asp Ser Ser Asn Thr Ser Leu Pro
 385 390 395 400

Phe Ser Asn Met Gly Asn Pro Met Asn Thr Thr Gln Leu Gly Lys Ser
 405 410 415

Leu Phe Gln Trp Gln Val Glu Gln Glu Glu Ser Lys Leu Ala Asn Ile
 420 425 430

Ser Gln Asp Gln Phe Leu Ser Lys Asp Ala Asp Gly Asp Thr Phe Leu
 435 440 445

His Ile Ala Val Ala Gln Gly Arg Arg Ala Leu Ser Tyr Val Leu Ala
 450 455 460

Arg Lys Met Asn Ala Leu His Met Leu Asp Ile Lys Glu His Asn Gly
 465 470 475 480

Gln Ser Ala Phe Gln Val Ala Val Ala Ala Asn Gln His Leu Ile Val
 485 490 495

Gln Asp Leu Val Asn Ile Gly Ala Gln Val Asn Thr Thr Asp Cys Trp
 500 505 510

Gly Arg Thr Pro Leu His Val Cys Ala Glu Lys Gly His Ser Gln Val

515

520

525

Leu Gln Ala Ile Gln Lys Gly Ala Val Gly Ser Asn Gln Phe Val Asp
 530 535 540

Leu Glu Ala Thr Asn Tyr Asp Gly Leu Thr Pro Leu His Cys Ala Val
 545 550 555 560

Ile Ala His Asn Ala Val Val His Glu Leu Gln Arg Asn Gln Gln Pro
 565 570 575

His Ser Pro Glu Val Gln Glu Leu Leu Leu Lys Asn Lys Ser Leu Val
 580 585 590

Asp Thr Ile Lys Cys Leu Ile Gln Met Gly Ala Ala Val Glu Ala Lys
 595 600 605

Asp Arg Lys Ser Gly Arg Thr Ala Leu His Leu Ala Ala Glu Glu Ala
 610 615 620

Asn Leu Glu Leu Ile Arg Leu Phe Leu Glu Leu Pro Ser Cys Leu Ser
 625 630 635 640

Phe Val Asn Ala Lys Ala Tyr Asn Gly Asn Thr Ala Leu His Val Ala
 645 650 655

Ala Ser Leu Gln Tyr Arg Leu Thr Gln Leu Asp Ala Val Arg Leu Leu
 660 665 670

Met Arg Lys Gly Ala Asp Pro Ser Thr Arg Asn Leu Glu Asn Glu Gln
 675 680 685

Pro Val His Leu Val Pro Asp Gly Pro Val Gly Glu Gln Ile Arg Arg
 690 695 700

Ile Leu Lys Gly Lys Ser Ile Gln Gln Arg Ala Pro Pro Tyr
 705 710 715

<210> 2940

<211> 247

<212> PRT

<213> Homo sapiens

<400> 2940

Met Gln Pro Ile Leu Leu Leu Leu Ala Phe Leu Leu Leu Pro Arg Ala
 1 5 10 15

Asp Ala Gly Glu Ile Ile Gly Gly His Glu Ala Lys Pro His Ser Arg
 20 25 30

Pro Tyr Met Ala Tyr Leu Met Ile Trp Asp Gln Lys Ser Leu Lys Arg
 35 40 45

Cys Gly Gly Phe Leu Ile Gln Asp Asp Phe Val Leu Thr Ala Ala His
 50 55 60

Cys Trp Gly Ser Ser Ile Asn Val Thr Leu Gly Ala His Asn Ile Lys
 65 70 75 80

Glu Gln Glu Pro Thr Gln Gln Phe Ile Pro Val Lys Arg Pro Ile Pro
 85 90 95

His Pro Ala Tyr Asn Pro Lys Asn Phe Ser Asn Asp Ile Met Leu Leu
 100 105 110

Gln Leu Glu Arg Lys Ala Lys Arg Thr Arg Ala Val Gln Pro Leu Arg
 115 120 125

Leu Pro Ser Asn Lys Ala Gln Val Lys Pro Gly Gln Thr Cys Ser Val
 130 135 140

Ala Gly Trp Gly Gln Thr Ala Pro Leu Gly Lys His Ser His Thr Leu
 145 150 155 160

Gln Glu Val Lys Met Thr Val Gln Glu Asp Arg Lys Cys Glu Ser Asp
 165 170 175

Leu Arg His Tyr Tyr Asp Ser Thr Ile Glu Leu Cys Val Gly Asp Pro
 180 185 190

Glu Ile Lys Lys Thr Ser Phe Lys Gly Asp Ser Gly Gly Pro Leu Val
 195 200 205

Cys Asn Lys Val Ala Gln Gly Ile Val Ser Tyr Gly Arg Asn Asn Gly
 210 215 220

Met Pro Pro Arg Ala Cys Thr Lys Val Ser Ser Phe Val His Trp Ile
 225 230 235 240

Lys Lys Thr Met Lys Arg Tyr
 245

<210> 2941
 <211> 191
 <212> PRT
 <213> Homo sapiens

<400> 2941

Met His Asp Ser Asn Asn Val Glu Lys Asp Ile Thr Pro Ser Glu Leu
 1 5 10 15

Pro Ala Asn Pro Gly Cys Leu His Ser Lys Glu His Ser Ile Lys Ala
 20 25 30

Thr Leu Ile Trp Arg Leu Phe Phe Leu Ile Met Phe Leu Thr Ile Ile
 35 40 45

Val Cys Gly Met Val Ala Ala Leu Ser Ala Ile Arg Ala Asn Cys His
 50 55 60

Gln Glu Pro Ser Val Cys Leu Gln Ala Ala Cys Pro Glu Ser Trp Ile
 65 70 75 80

Gly Phe Gln Arg Lys Cys Phe Tyr Phe Ser Asp Asp Thr Lys Asn Trp
 85 90 95

Thr Ser Ser Gln Arg Phe Cys Asp Ser Gln Asp Ala Asp Leu Ala Gln
 100 105 110

Val Glu Ser Phe Gln Glu Leu Asn Phe Leu Leu Arg Tyr Lys Gly Pro
 115 120 125

Ser Asp His Trp Ile Gly Leu Ser Arg Glu Gln Gly Gln Pro Trp Lys
 130 135 140

Trp Ile Asn Gly Thr Glu Trp Thr Arg Gln Phe Pro Ile Leu Gly Ala
 145 150 155 160

Gly Glu Cys Ala Tyr Leu Asn Asp Lys Gly Ala Ser Ser Ala Arg His
 165 170 175

Tyr Thr Glu Arg Lys Trp Ile Cys Ser Lys Ser Asp Ile His Val
 180 185 190

<210> 2942
 <211> 441
 <212> PRT
 <213> Homo sapiens

<400> 2942

Met Glu Ile Arg Leu Asp Thr Leu Ser Ala Ser Leu Gly Arg Ser Ser
 1 5 10 15
 Thr Leu Asn Asp Cys Asn Leu Glu Asp Lys Leu Ala Trp Tyr Glu Gly
 20 25 30
 Glu Ala Tyr Met Trp His His Trp Lys Pro Phe Pro Glu Asn Pro Leu
 35 40 45
 Trp Thr Cys Leu Asp Phe Gln Ile Ala Gln Val Gly Pro Trp Asp Tyr
 50 55 60
 Cys Ser Ser Cys Ile Arg His Thr Arg Leu Lys Ser Ser Cys Ser Asp
 65 70 75 80
 Met Asp Leu Leu His Ser Trp Arg Ser Ser Ser Phe Gly Asn Phe Asp
 85 90 95
 Arg Phe Arg Asn Asn Ser Leu Ser Lys Pro Asp Asp Ser Thr Glu Ala
 100 105 110
 His Glu Gly Asp Pro Thr Asn Gly Ser Gly Glu Gln Ser Lys Thr Ser
 115 120 125
 Asn Asn Gly Gly Gly Leu Gly Lys Lys Met Arg Ala Ile Ser Trp Thr
 130 135 140
 Met Lys Lys Lys Val Gly Lys Lys Tyr Ile Lys Ala Leu Ser Glu Glu
 145 150 155 160
 Lys Asp Glu Glu Asp Gly Glu Asn Ala His Pro Tyr Arg Asn Ser Asp
 165 170 175
 Pro Val Ile Gly Thr His Thr Glu Lys Val Ser Leu Lys Ala Ser Asp
 180 185 190
 Ser Met Asp Ser Leu Tyr Ser Gly Gln Ser Ser Ser Ser Gly Ile Thr
 195 200 205
 Ser Cys Ser Asp Gly Thr Ser Asn Arg Asp Ser Phe Arg Leu Asp Asp
 210 215 220
 Asp Gly Pro Tyr Ser Gly Pro Phe Cys Gly Arg Ala Arg Val His Thr
 225 230 235 240

Asp Phe Thr Pro Ser Pro Tyr Asp Thr Asp Ser Leu Lys Ile Lys Lys
 245 250 255

Gly Asp Ile Ile Asp Ile Ile Cys Lys Thr Pro Met Gly Met Trp Thr
 260 265 270

Gly Met Leu Asn Asn Lys Val Gly Asn Phe Lys Phe Ile Tyr Val Asp
 275 280 285

Val Ile Ser Glu Glu Glu Ala Ala Pro Lys Lys Ile Lys Ala Asn Arg
 290 295 300

Arg Ser Asn Ser Lys Lys Ser Lys Thr Leu Gln Glu Phe Leu Glu Arg
 305 310 315 320

Ile His Leu Gln Glu Tyr Thr Ser Thr Leu Leu Leu Asn Gly Tyr Glu
 325 330 335

Thr Leu Glu Asp Leu Lys Asp Ile Lys Glu Ser His Leu Ile Glu Leu
 340 345 350

Asn Ile Glu Asn Pro Asp Asp Arg Arg Arg Leu Leu Ser Ala Ala Glu
 355 360 365

Asn Phe Leu Glu Glu Glu Ile Ile Gln Glu Gln Glu Asn Glu Pro Glu
 370 375 380

Pro Leu Ser Leu Ser Ser Asp Ile Ser Leu Asn Lys Ser Gln Leu Asp
 385 390 395 400

Asp Cys Pro Arg Asp Ser Gly Cys Tyr Ile Ser Ser Gly Asn Ser Asp
 405 410 415

Asn Gly Lys Glu Asp Leu Glu Ser Glu Asn Leu Ser Asp Met Val His
 420 425 430

Lys Ile Ile Ile Thr Glu Pro Ser Asp
 435 440

<210> 2943

<211> 564

<212> PRT

<213> Homo sapiens

<400> 2943

Met Lys Glu His Gly Gly Thr Phe Ser Ser Thr Gly Ile Ser Gly Gly
 1 5 10 15

Ser Gly Asp Ser Ala Met Asp Ser Leu Gln Pro Leu Gln Pro Asn Tyr
 20 25 30

Met Pro Val Cys Leu Phe Ala Glu Glu Ser Tyr Gln Lys Leu Ala Met
 35 40 45

Glu Thr Leu Glu Glu Leu Asp Trp Cys Leu Asp Gln Leu Glu Thr Ile
 50 55 60

Gln Thr Tyr Arg Ser Val Ser Glu Met Ala Ser Asn Lys Phe Lys Arg
 65 70 75 80

Met Leu Asn Arg Glu Leu Thr His Leu Ser Glu Met Ser Arg Ser Gly
 85 90 95

Asn Gln Val Ser Glu Tyr Ile Ser Asn Thr Phe Leu Asp Lys Gln Asn
 100 105 110

Asp Val Glu Ile Pro Ser Pro Thr Gln Lys Asp Arg Glu Lys Lys Lys
 115 120 125

Lys Gln Gln Leu Met Thr Gln Ile Ser Gly Val Lys Lys Leu Met His
 130 135 140

Ser Ser Ser Leu Asn Asn Thr Ser Ile Ser Arg Phe Gly Val Asn Thr
 145 150 155 160

Glu Asn Glu Asp His Leu Ala Lys Glu Leu Glu Asp Leu Asn Lys Trp
 165 170 175

Gly Leu Asn Ile Phe Asn Val Ala Gly Tyr Ser His Asn Arg Pro Leu
 180 185 190

Thr Cys Ile Met Tyr Ala Ile Phe Gln Glu Arg Asp Leu Leu Lys Thr
 195 200 205

Phe Arg Ile Ser Ser Asp Thr Phe Ile Thr Tyr Met Met Thr Leu Glu
 210 215 220

Asp His Tyr His Ser Asp Val Ala Tyr His Asn Ser Leu His Ala Ala
 225 230 235 240

Asp Val Ala Gln Ser Thr His Val Leu Leu Ser Thr Pro Ala Leu Asp
 245 250 255

Ala Val Phe Thr Asp Leu Glu Ile Leu Ala Ala Ile Phe Ala Ala Ala
 260 265 270

Ile His Asp Val Asp His Pro Gly Val Ser Asn Gln Phe Leu Ile Asn
 275 280 285

Thr Asn Ser Glu Leu Ala Leu Met Tyr Asn Asp Glu Ser Val Leu Glu
 290 295 300

Asn His His Leu Ala Val Gly Phe Lys Leu Leu Gln Glu Glu His Cys
 305 310 315 320

Asp Ile Phe Met Asn Leu Thr Lys Lys Gln Arg Gln Thr Leu Arg Lys
 325 330 335

Met Val Ile Asp Met Val Leu Ala Thr Asp Met Ser Lys His Met Ser
 340 345 350

Leu Leu Ala Asp Leu Lys Thr Met Val Glu Thr Lys Lys Val Thr Ser
 355 360 365

Ser Gly Val Leu Leu Leu Asp Asn Tyr Thr Asp Arg Ile Gln Val Leu
 370 375 380

Arg Asn Met Val His Cys Ala Asp Leu Ser Asn Pro Thr Lys Ser Leu
 385 390 395 400

Glu Leu Tyr Arg Gln Trp Thr Asp Arg Ile Met Glu Glu Phe Phe Gln
 405 410 415

Gln Gly Asp Lys Glu Arg Glu Arg Gly Met Glu Ile Ser Pro Met Cys
 420 425 430

Asp Lys His Thr Ala Ser Val Glu Lys Ser Gln Val Gly Phe Ile Asp
 435 440 445

Tyr Ile Val His Pro Leu Trp Glu Thr Trp Ala Asp Leu Val Gln Pro
 450 455 460

Asp Ala Gln Asp Ile Leu Asp Thr Leu Glu Asp Asn Arg Asn Trp Tyr
 465 470 475 480

Gln Ser Met Ile Pro Gln Ser Pro Ser Pro Pro Leu Asp Glu Gln Asn
 485 490 495

Arg Asp Cys Gln Gly Leu Met Glu Lys Phe Gln Phe Glu Leu Thr Leu
 500 505 510

Asp Glu Glu Asp Ser Glu Gly Pro Glu Lys Glu Gly Glu Gly His Ser
 515 520 525

Tyr Phe Ser Ser Thr Lys Thr Leu Cys Val Ile Asp Pro Glu Asn Arg
 530 535 540

Asp Ser Leu Gly Glu Thr Asp Ile Asp Ile Ala Thr Glu Asp Lys Ser
 545 550 555 560

Pro Val Asp Thr

<210> 2944
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 2944

Met Lys Val Ser Ala Ala Ala Leu Ala Val Ile Leu Ile Ala Thr Ala
 1 5 10 15

Leu Cys Ala Pro Ala Ser Ala Ser Pro Tyr Ser Ser Asp Thr Thr Pro
 20 25 30

Cys Cys Phe Ala Tyr Ile Ala Arg Pro Leu Pro Arg Ala His Ile Lys
 35 40 45

Glu Tyr Phe Tyr Thr Ser Gly Lys Cys Ser Asn Pro Ala Val Val Phe
 50 55 60

Val Thr Arg Lys Asn Arg Gln Val Cys Ala Asn Pro Glu Lys Lys Trp
 65 70 75 80

Val Arg Glu Tyr Ile Asn Ser Leu Glu Met Ser
 85 90

<210> 2945
 <211> 461
 <212> PRT
 <213> Homo sapiens

<400> 2945

Met Ala Pro Val Ala Val Trp Ala Ala Leu Ala Val Gly Leu Glu Leu
 1 5 10 15

Trp Ala Ala Ala His Ala Leu Pro Ala Gln Val Ala Phe Thr Pro Tyr
 20 25 30

Ala Pro Glu Pro Gly Ser Thr Cys Arg Leu Arg Glu Tyr Tyr Asp Gln
 35 40 45

Thr Ala Gln Met Cys Cys Ser Lys Cys Ser Pro Gly Gln His Ala Lys
 50 55 60

Val Phe Cys Thr Lys Thr Ser Asp Thr Val Cys Asp Ser Cys Glu Asp
 65 70 75 80

Ser Thr Tyr Thr Gln Leu Trp Asn Trp Val Pro Glu Cys Leu Ser Cys
 85 90 95

Gly Ser Arg Cys Ser Ser Asp Gln Val Glu Thr Gln Ala Cys Thr Arg
 100 105 110

Glu Gln Asn Arg Ile Cys Thr Cys Arg Pro Gly Trp Tyr Cys Ala Leu
 115 120 125

Ser Lys Gln Glu Gly Cys Arg Leu Cys Ala Pro Leu Arg Lys Cys Arg
 130 135 140

Pro Gly Phe Gly Val Ala Arg Pro Gly Thr Glu Thr Ser Asp Val Val
 145 150 155 160

Cys Lys Pro Cys Ala Pro Gly Thr Phe Ser Asn Thr Thr Ser Ser Thr
 165 170 175

Asp Ile Cys Arg Pro His Gln Ile Cys Asn Val Val Ala Ile Pro Gly
 180 185 190

Asn Ala Ser Met Asp Ala Val Cys Thr Ser Thr Ser Pro Thr Arg Ser
 195 200 205

Met Ala Pro Gly Ala Val His Leu Pro Gln Pro Val Ser Thr Arg Ser
 210 215 220

Gln His Thr Gln Pro Thr Pro Glu Pro Ser Thr Ala Pro Ser Thr Ser
 225 230 235 240

Phe Leu Leu Pro Met Gly Pro Ser Pro Pro Ala Glu Gly Ser Thr Gly
 245 250 255

Asp Phe Ala Leu Pro Val Gly Leu Ile Val Gly Val Thr Ala Leu Gly
 260 265 270

Leu Leu Ile Ile Gly Val Val Asn Cys Val Ile Met Thr Gln Val Lys
 275 280 285

Lys Lys Pro Leu Cys Leu Gln Arg Glu Ala Lys Val Pro His Leu Pro
 290 295 300

Ala Asp Lys Ala Arg Gly Thr Gln Gly Pro Glu Gln Gln His Leu Leu
 305 310 315 320

Ile Thr Ala Pro Ser Ser Ser Ser Ser Ser Leu Glu Ser Ser Ala Ser
 325 330 335

Ala Leu Asp Arg Arg Ala Pro Thr Arg Asn Gln Pro Gln Ala Pro Gly
 340 345 350

Val Glu Ala Ser Gly Ala Gly Glu Ala Arg Ala Ser Thr Gly Ser Ser
 355 360 365

Asp Ser Ser Pro Gly Gly His Gly Thr Gln Val Asn Val Thr Cys Ile
 370 375 380

Val Asn Val Cys Ser Ser Ser Asp His Ser Ser Gln Cys Ser Ser Gln
 385 390 395 400

Ala Ser Ser Thr Met Gly Asp Thr Asp Ser Ser Pro Ser Glu Ser Pro
 405 410 415

Lys Asp Glu Gln Val Pro Phe Ser Lys Glu Glu Cys Ala Phe Arg Ser
 420 425 430

Gln Leu Glu Thr Pro Glu Thr Leu Leu Gly Ser Thr Glu Glu Lys Pro
 435 440 445

Leu Pro Leu Gly Val Pro Asp Ala Gly Met Lys Pro Ser
 450 455 460

<210> 2946

<211> 823

<212> PRT

<213> Homo sapiens

<400> 2946

Met Ser Arg Arg Lys Gln Gly Asn Pro Gln His Leu Ser Gln Arg Glu
 1 5 10 15

Leu Ile Thr Pro Glu Ala Asp His Val Glu Ala Ala Ile Leu Glu Glu
 20 25 30

Asp Glu Gly Leu Glu Ile Glu Glu Pro Ser Gly Leu Gly Leu Met Val
 35 40 45

Gly Gly Pro Asp Pro Asp Leu Leu Thr Cys Gly Gln Cys Gln Met Asn
 50 55 60

Phe Pro Leu Gly Asp Ile Leu Val Phe Ile Glu His Lys Arg Lys Gln
 65 70 75 80

Cys Gly Gly Ser Leu Gly Ala Cys Tyr Asp Lys Ala Leu Asp Lys Asp
 85 90 95

Ser Pro Pro Pro Ser Ser Arg Ser Glu Leu Arg Lys Val Ser Glu Pro
 100 105 110

Val Glu Ile Gly Ile Gln Val Thr Pro Asp Glu Asp Asp His Leu Leu
 115 120 125

Ser Pro Thr Lys Gly Ile Cys Pro Lys Gln Glu Asn Ile Ala Gly Lys
 130 135 140

Asp Glu Pro Ser Ser Tyr Ile Cys Thr Thr Cys Lys Gln Pro Phe Asn
 145 150 155 160

Ser Ala Trp Phe Leu Leu Gln His Ala Gln Asn Thr His Gly Phe Arg
 165 170 175

Ile Tyr Leu Glu Pro Gly Pro Ala Ser Ser Ser Leu Thr Pro Arg Leu
 180 185 190

Thr Ile Pro Pro Pro Leu Gly Pro Glu Ala Val Ala Gln Ser Pro Leu
 195 200 205

Met Asn Phe Leu Gly Asp Ser Asn Pro Phe Asn Leu Leu Arg Met Thr
 210 215 220

Gly Pro Ile Leu Arg Asp His Pro Gly Phe Gly Glu Gly Arg Leu Pro
 225 230 235 240

Gly Thr Pro Pro Leu Phe Ser Pro Pro Pro Arg His His Leu Asp Pro
 245 250 255

His Arg Leu Ser Ala Glu Glu Met Gly Leu Val Ala Gln His Pro Ser
 260 265 270

Ala Phe Asp Arg Val Met Arg Leu Asn Pro Met Ala Ile Asp Ser Pro
 275 280 285

Ala Met Asp Phe Ser Arg Arg Leu Arg Glu Leu Ala Gly Asn Ser Ser
 290 295 300

Thr Pro Pro Pro Val Ser Pro Gly Arg Gly Asn Pro Met His Arg Leu
 305 310 315 320

Leu Asn Pro Phe Gln Pro Ser Pro Lys Ser Pro Phe Leu Ser Thr Pro
 325 330 335

Pro Leu Pro Pro Met Pro Pro Gly Gly Thr Pro Pro Pro Gln Pro Pro
 340 345 350

Ala Lys Ser Lys Ser Cys Glu Phe Cys Gly Lys Thr Phe Lys Phe Gln
 355 360 365

Ser Asn Leu Ile Val His Arg Arg Ser His Thr Gly Glu Lys Pro Tyr
 370 375 380

Lys Cys Gln Leu Cys Asp His Ala Cys Ser Gln Ala Ser Lys Leu Lys
 385 390 395 400

Arg His Met Lys Thr His Met His Lys Ala Gly Ser Leu Ala Gly Arg
 405 410 415

Ser Asp Asp Gly Leu Ser Ala Ala Ser Ser Pro Glu Pro Gly Thr Ser
 420 425 430

Glu Leu Ala Gly Glu Gly Leu Lys Ala Ala Asp Gly Asp Phe Arg His
 435 440 445

His Glu Ser Asp Pro Ser Leu Gly His Glu Pro Glu Glu Glu Asp Glu
 450 455 460

Glu Glu Glu Glu Glu Glu Glu Glu Leu Leu Leu Glu Asn Glu Ser Arg
 465 470 475 480

Pro Glu Ser Ser Phe Ser Met Asp Ser Glu Leu Ser Arg Asn Arg Glu
 485 490 495

Asn Gly Gly Gly Gly Val Pro Gly Val Pro Gly Ala Gly Gly Gly Ala
 500 505 510

Ala Lys Ala Leu Ala Asp Glu Lys Ala Leu Val Leu Gly Lys Val Met
 515 520 525

Glu Asn Val Gly Leu Gly Ala Leu Pro Gln Tyr Gly Glu Leu Leu Ala
 530 535 540

Asp Lys Gln Lys Arg Gly Ala Phe Leu Lys Arg Ala Ala Gly Gly Gly
 545 550 555 560

Asp Ala Gly Asp Asp Asp Asp Ala Gly Gly Cys Gly Asp Ala Gly Ala
 565 570 575

Gly Gly Ala Val Asn Gly Arg Gly Gly Gly Phe Ala Pro Gly Thr Glu
 580 585 590

Pro Phe Pro Gly Leu Phe Pro Arg Lys Pro Ala Pro Leu Pro Ser Pro
 595 600 605

Gly Leu Asn Ser Ala Ala Lys Arg Ile Lys Val Glu Lys Asp Leu Glu
 610 615 620

Leu Pro Pro Ala Ala Leu Ile Pro Ser Glu Asn Val Tyr Ser Gln Trp
 625 630 635 640

Leu Val Gly Tyr Ala Ala Ser Arg His Phe Met Lys Asp Pro Phe Leu
 645 650 655

Gly Phe Thr Asp Ala Arg Gln Ser Pro Phe Ala Thr Ser Ser Glu His
 660 665 670

Ser Ser Glu Asn Gly Ser Leu Arg Phe Ser Thr Pro Pro Gly Asp Leu
 675 680 685

Leu Asp Gly Gly Leu Ser Gly Arg Ser Gly Thr Ala Ser Gly Gly Ser
 690 695 700

Thr Pro His Leu Gly Gly Pro Gly Pro Gly Arg Pro Ser Ser Lys Glu
 705 710 715 720

Gly Arg Arg Ser Asp Thr Cys Glu Tyr Cys Gly Lys Val Phe Lys Asn
 725 730 735

Cys Ser Asn Leu Thr Val His Arg Arg Ser His Thr Gly Glu Arg Pro

740

745

750

Tyr Lys Cys Glu Leu Cys Asn Tyr Ala Cys Ala Gln Ser Ser Lys Leu
 755 760 765

Thr Arg His Met Lys Thr His Gly Gln Ile Gly Lys Glu Val Tyr Arg
 770 775 780

Cys Asp Ile Cys Gln Met Pro Phe Ser Val Tyr Ser Thr Leu Glu Lys
 785 790 795 800

His Met Lys Lys Trp His Gly Glu His Leu Leu Thr Asn Asp Val Lys
 805 810 815

Ile Glu Gln Ala Glu Arg Ser
 820

<210> 2947
 <211> 441
 <212> PRT
 <213> Homo sapiens

<400> 2947

Met Val Pro Pro Lys Leu His Val Leu Phe Cys Leu Cys Gly Cys Leu
 1 5 10 15

Ala Val Val Tyr Pro Phe Asp Trp Gln Tyr Ile Asn Pro Val Ala His
 20 25 30

Met Lys Ser Ser Ala Trp Val Asn Lys Ile Gln Val Leu Met Ala Ala
 35 40 45

Ala Ser Phe Gly Gln Thr Lys Ile Pro Arg Gly Asn Gly Pro Tyr Ser
 50 55 60

Val Gly Cys Thr Asp Leu Met Phe Asp His Thr Asn Lys Gly Thr Phe
 65 70 75 80

Leu Arg Leu Tyr Tyr Pro Ser Gln Asp Asn Asp Arg Leu Asp Thr Leu
 85 90 95

Trp Ile Pro Asn Lys Glu Tyr Phe Trp Gly Leu Ser Lys Phe Leu Gly
 100 105 110

Thr His Trp Leu Met Gly Asn Ile Leu Arg Leu Leu Phe Gly Ser Met
 115 120 125

Thr Thr Pro Ala Asn Trp Asn Ser Pro Leu Arg Pro Gly Glu Lys Tyr
 130 135 140

Pro Leu Val Val Phe Ser His Gly Leu Gly Ala Phe Arg Thr Leu Tyr
 145 150 155 160

Ser Ala Ile Gly Ile Asp Leu Ala Ser His Gly Phe Ile Val Ala Ala
 165 170 175

Val Glu His Arg Asp Arg Ser Ala Ser Ala Thr Tyr Tyr Phe Lys Asp
 180 185 190

Gln Ser Ala Ala Glu Ile Gly Asp Lys Ser Trp Leu Tyr Leu Arg Thr
 195 200 205

Leu Lys Gln Glu Glu Glu Thr His Ile Arg Asn Glu Gln Val Arg Gln
 210 215 220

Arg Ala Lys Glu Cys Ser Gln Ala Leu Ser Leu Ile Leu Asp Ile Asp
 225 230 235 240

His Gly Lys Pro Val Lys Asn Ala Leu Asp Leu Lys Phe Asp Met Glu
 245 250 255

Gln Leu Lys Asp Ser Ile Asp Arg Glu Lys Ile Ala Val Ile Gly His
 260 265 270

Ser Phe Gly Gly Ala Thr Val Ile Gln Thr Leu Ser Glu Asp Gln Arg
 275 280 285

Phe Arg Cys Gly Ile Ala Leu Asp Ala Trp Met Phe Pro Leu Gly Asp
 290 295 300

Glu Val Tyr Ser Arg Ile Pro Gln Pro Leu Phe Phe Ile Asn Ser Glu
 305 310 315 320

Tyr Phe Gln Tyr Pro Ala Asn Ile Ile Lys Met Lys Lys Cys Tyr Ser
 325 330 335

Pro Asp Lys Glu Arg Lys Met Ile Thr Ile Arg Gly Ser Val His Gln
 340 345 350

Asn Phe Ala Asp Phe Thr Phe Ala Thr Gly Lys Ile Ile Gly His Met
 355 360 365

Leu Lys Leu Lys Gly Asp Ile Asp Ser Asn Val Ala Ile Asp Leu Ser
 370 375 380

Asn Lys Ala Ser Leu Ala Phe Leu Gln Lys His Leu Gly Leu His Lys
 385 390 395 400

Asp Phe Asp Gln Trp Asp Cys Leu Ile Glu Gly Asp Asp Glu Asn Leu
 405 410 415

Ile Pro Gly Thr Asn Ile Asn Thr Thr Asn Gln His Ile Met Leu Gln
 420 425 430

Asn Ser Ser Gly Ile Glu Lys Tyr Asn
 435 440

<210> 2948
 <211> 1044
 <212> PRT
 <213> Homo sapiens

<400> 2948

Met Pro Pro Gly Val Asp Cys Pro Met Glu Phe Trp Thr Lys Glu Glu
 1 5 10 15

Asn Gln Ser Val Val Val Asp Phe Leu Leu Pro Thr Gly Val Tyr Leu
 20 25 30

Asn Phe Pro Val Ser Arg Asn Ala Asn Leu Ser Thr Ile Lys Gln Leu
 35 40 45

Leu Trp His Arg Ala Gln Tyr Glu Pro Leu Phe His Met Leu Ser Gly
 50 55 60

Pro Glu Ala Tyr Val Phe Thr Cys Ile Asn Gln Thr Ala Glu Gln Gln
 65 70 75 80

Glu Leu Glu Asp Glu Gln Arg Arg Leu Cys Asp Val Gln Pro Phe Leu
 85 90 95

Pro Val Leu Arg Leu Val Ala Arg Glu Gly Asp Arg Val Lys Lys Leu
 100 105 110

Ile Asn Ser Gln Ile Ser Leu Leu Ile Gly Lys Gly Leu His Glu Phe
 115 120 125

Asp Ser Leu Cys Asp Pro Glu Val Asn Asp Phe Arg Ala Lys Met Cys
 130 135 140

Gln Phe Cys Glu Glu Ala Ala Ala Arg Arg Gln Gln Leu Gly Trp Glu
 145 150 155 160

Ala Trp Leu Gln Tyr Ser Phe Pro Leu Gln Leu Glu Pro Ser Ala Gln
 165 170 175

Thr Trp Gly Pro Gly Thr Leu Arg Leu Pro Asn Arg Ala Leu Leu Val
 180 185 190

Asn Val Lys Phe Glu Gly Ser Glu Glu Ser Phe Thr Phe Gln Val Ser
 195 200 205

Thr Lys Asp Val Pro Leu Ala Leu Met Ala Cys Ala Leu Arg Lys Lys
 210 215 220

Ala Thr Val Phe Arg Gln Pro Leu Val Glu Gln Pro Glu Asp Tyr Thr
 225 230 235 240

Leu Gln Val Asn Gly Arg His Glu Tyr Leu Tyr Gly Asn Tyr Pro Leu
 245 250 255

Cys Gln Phe Gln Tyr Ile Cys Ser Cys Leu His Ser Gly Leu Thr Pro
 260 265 270

His Leu Thr Met Val His Ser Ser Ser Ile Leu Ala Met Arg Asp Glu
 275 280 285

Gln Ser Asn Pro Ala Pro Gln Val Gln Lys Pro Arg Ala Lys Pro Pro
 290 295 300

Pro Ile Pro Ala Lys Lys Pro Ser Ser Val Ser Leu Trp Ser Leu Glu
 305 310 315 320

Gln Pro Phe Arg Ile Glu Leu Ile Gln Gly Ser Lys Val Asn Ala Asp
 325 330 335

Glu Arg Met Lys Leu Val Val Gln Ala Gly Leu Phe His Gly Asn Glu
 340 345 350

Met Leu Cys Lys Thr Val Ser Ser Ser Glu Val Ser Val Cys Ser Glu
 355 360 365

Pro Val Trp Lys Gln Arg Leu Glu Phe Asp Ile Asn Ile Cys Asp Leu
 370 375 380

Pro Arg Met Ala Arg Leu Cys Phe Ala Leu Tyr Ala Val Ile Glu Lys
 385 390 395 400

Ala Lys Lys Ala Arg Ser Thr Lys Lys Lys Ser Lys Lys Ala Asp Cys
 405 410 415

Pro Ile Ala Trp Ala Asn Leu Met Leu Phe Asp Tyr Lys Asp Gln Leu
 420 425 430

Lys Thr Gly Glu Arg Cys Leu Tyr Met Trp Pro Ser Val Pro Asp Glu
 435 440 445

Lys Gly Glu Leu Leu Asn Pro Thr Gly Thr Val Arg Ser Asn Pro Asn
 450 455 460

Thr Asp Ser Ala Ala Ala Leu Leu Ile Cys Leu Pro Glu Val Ala Pro
 465 470 475 480

His Pro Val Tyr Tyr Pro Ala Leu Glu Lys Ile Leu Glu Leu Gly Arg
 485 490 495

His Ser Glu Cys Val His Val Thr Glu Glu Glu Gln Leu Gln Leu Arg
 500 505 510

Glu Ile Leu Glu Arg Arg Gly Ser Gly Glu Leu Tyr Glu His Glu Lys
 515 520 525

Asp Leu Val Trp Lys Leu Arg His Glu Val Gln Glu His Phe Pro Glu
 530 535 540

Ala Leu Ala Arg Leu Leu Leu Val Thr Lys Trp Asn Lys His Glu Asp
 545 550 555 560

Val Ala Gln Met Leu Tyr Leu Leu Cys Ser Trp Pro Glu Leu Pro Val
 565 570 575

Leu Ser Ala Leu Glu Leu Leu Asp Phe Ser Phe Pro Asp Cys His Val
 580 585 590

Gly Ser Phe Ala Ile Lys Ser Leu Arg Lys Leu Thr Asp Asp Glu Leu
 595 600 605

Phe Gln Tyr Leu Leu Gln Leu Val Gln Val Leu Lys Tyr Glu Ser Tyr
 610 615 620

Leu Asp Cys Glu Leu Thr Lys Phe Leu Leu Asp Arg Ala Leu Ala Asn
 625 630 635 640

Arg Lys Ile Gly His Phe Leu Phe Trp His Leu Arg Ser Glu Met His
 645 650 655

Val Pro Ser Val Ala Leu Arg Phe Gly Leu Ile Leu Glu Ala Tyr Cys
 660 665 670

Arg Gly Ser Thr His His Met Lys Val Leu Met Lys Gln Gly Glu Ala
 675 680 685

Leu Ser Lys Leu Lys Ala Leu Asn Asp Phe Val Lys Leu Ser Ser Gln
 690 695 700

Lys Thr Pro Lys Pro Gln Thr Lys Glu Leu Met His Leu Cys Met Arg
 705 710 715 720

Gln Glu Ala Tyr Leu Glu Ala Leu Ser His Leu Gln Ser Pro Leu Asp
 725 730 735

Pro Ser Thr Leu Leu Ala Glu Val Cys Val Glu Gln Cys Thr Phe Met
 740 745 750

Asp Ser Lys Met Lys Pro Leu Trp Ile Met Tyr Ser Asn Glu Glu Ala
 755 760 765

Gly Ser Gly Gly Ser Val Gly Ile Ile Phe Lys Asn Gly Asp Asp Leu
 770 775 780

Arg Gln Asp Met Leu Thr Leu Gln Met Ile Gln Leu Met Asp Val Leu
 785 790 795 800

Trp Lys Gln Glu Gly Leu Asp Leu Arg Met Thr Pro Tyr Gly Cys Leu
 805 810 815

Pro Thr Gly Asp Arg Thr Gly Leu Ile Glu Val Val Leu Arg Ser Asp
 820 825 830

Thr Ile Ala Asn Ile Gln Leu Asn Lys Ser Asn Met Ala Ala Thr Ala
 835 840 845

Ala Phe Asn Lys Asp Ala Leu Leu Asn Trp Leu Lys Ser Lys Asn Pro
 850 855 860

Gly Glu Ala Leu Asp Arg Ala Ile Glu Glu Phe Thr Leu Ser Cys Ala

865 870 875 880
 Gly Tyr Cys Val Ala Thr Tyr Val Leu Gly Ile Gly Asp Arg His Ser
 885 890 895
 Asp Asn Ile Met Ile Arg Glu Ser Gly Gln Leu Phe His Ile Asp Phe
 900 905 910
 Gly His Phe Leu Gly Asn Phe Lys Thr Lys Phe Gly Ile Asn Arg Glu
 915 920 925
 Arg Val Pro Phe Ile Leu Thr Tyr Asp Phe Val His Val Ile Gln Gln
 930 935 940
 Gly Lys Thr Asn Asn Ser Glu Lys Phe Glu Arg Phe Arg Gly Tyr Cys
 945 950 955 960
 Glu Arg Ala Tyr Thr Ile Leu Arg Arg His Gly Leu Leu Phe Leu His
 965 970 975
 Leu Phe Ala Leu Met Arg Ala Ala Gly Leu Pro Glu Leu Ser Cys Ser
 980 985 990
 Lys Asp Ile Gln Tyr Leu Lys Asp Ser Leu Ala Leu Gly Lys Thr Glu
 995 1000 1005
 Glu Glu Ala Leu Lys His Phe Arg Val Lys Phe Asn Glu Ala Leu
 1010 1015 1020
 Arg Glu Ser Trp Lys Thr Lys Val Asn Trp Leu Ala His Asn Val
 1025 1030 1035
 Ser Lys Asp Asn Arg Gln
 1040

 <210> 2949
 <211> 167
 <212> PRT
 <213> Homo sapiens

 <400> 2949
 Met Glu His Ile His Asp Ser Asp Gly Ser Ser Ser Ser Ser His Gln
 1 5 10 15
 Ser Leu Lys Ser Thr Ala Lys Trp Ala Ala Ser Leu Glu Asn Leu Leu
 20 25 30

Glu Asp Pro Glu Gly Val Lys Arg Phe Arg Glu Phe Leu Lys Lys Glu
 35 40 45

Phe Ser Glu Glu Asn Val Leu Phe Trp Leu Ala Cys Glu Asp Phe Lys
 50 55 60

Lys Met Gln Asp Lys Thr Gln Met Gln Glu Lys Ala Lys Glu Ile Tyr
 65 70 75 80

Met Thr Phe Leu Ser Ser Lys Ala Ser Ser Gln Val Asn Val Glu Gly
 85 90 95

Gln Ser Arg Leu Asn Glu Lys Ile Leu Glu Glu Pro His Pro Leu Met
 100 105 110

Phe Gln Lys Leu Gln Asp Gln Ile Phe Asn Leu Met Lys Tyr Asp Ser
 115 120 125

Tyr Ser Arg Phe Leu Lys Ser Asp Leu Phe Leu Lys His Lys Arg Thr
 130 135 140

Glu Glu Glu Glu Glu Asp Leu Pro Asp Ala Gln Thr Ala Ala Lys Arg
 145 150 155 160

Ala Ser Arg Ile Tyr Asn Thr
 165

<210> 2950
 <211> 263
 <212> PRT
 <213> Homo sapiens

<400> 2950

Met Val Lys Ile Ala Phe Asn Thr Pro Thr Ala Val Gln Lys Glu Glu
 1 5 10 15

Ala Arg Gln Asp Val Glu Ala Leu Leu Ser Arg Thr Val Arg Thr Gln
 20 25 30

Ile Leu Thr Gly Lys Glu Leu Arg Val Ala Thr Gln Glu Lys Glu Gly
 35 40 45

Ser Ser Gly Arg Cys Met Leu Thr Leu Leu Gly Leu Ser Phe Ile Leu
 50 55 60

Ala Gly Leu Ile Val Gly Gly Ala Cys Ile Tyr Lys Tyr Phe Met Pro

65	70	75	80
Lys Ser Thr Ile Tyr Arg Gly Glu Met Cys Phe Phe Asp Ser Glu Asp	85	90	95
Pro Ala Asn Ser Leu Arg Gly Gly Glu Pro Asn Phe Leu Pro Val Thr	100	105	110
Glu Glu Ala Asp Ile Arg Glu Asp Asp Asn Ile Ala Ile Ile Asp Val	115	120	125
Pro Val Pro Ser Phe Ser Asp Ser Asp Pro Ala Ala Ile Ile His Asp	130	135	140
Phe Glu Lys Gly Met Thr Ala Tyr Leu Asp Leu Leu Leu Gly Asn Cys	145	150	155
Tyr Leu Met Pro Leu Asn Thr Ser Ile Val Met Pro Pro Lys Asn Leu	165	170	175
Val Glu Leu Phe Gly Lys Leu Ala Ser Gly Arg Tyr Leu Pro Gln Thr	180	185	190
Tyr Val Val Arg Glu Asp Leu Val Ala Val Glu Glu Ile Arg Asp Val	195	200	205
Ser Asn Leu Gly Ile Phe Ile Tyr Gln Leu Cys Asn Asn Arg Lys Ser	210	215	220
Phe Arg Leu Arg Arg Arg Asp Leu Leu Leu Gly Phe Asn Lys Arg Ala	225	230	235
Ile Asp Lys Cys Trp Lys Ile Arg His Phe Pro Asn Glu Phe Ile Val	245	250	255
Glu Thr Lys Ile Cys Gln Glu	260		
<210> 2951			
<211> 201			
<212> PRT			
<213> Homo sapiens			
<400> 2951			
Met Asp Pro Gly Trp Pro Cys Cys Pro Leu Pro Val Ala Phe Leu Ser	1	5	10
			15

Arg Trp Leu Gln Ser Phe Val Asp Gly Leu Phe Cys Thr Gly Gly Leu
20 25 30

Leu Arg Gln Arg Thr Cys Lys Phe Ala Gly Ala Ala Ser Gln Ala Pro
35 40 45

His Ala Pro Ala Phe Leu Arg Ala Arg Gly Glu Pro Gln Asp Pro Leu
50 55 60

Ser His Pro Arg Val Pro Ala Val Ser Ala Asn Cys Arg Met Trp Lys
65 70 75 80

His Leu Pro Val His Ser Ser Pro Thr Pro Arg Leu Thr Pro Leu Trp
85 90 95

Lys Leu Gln Ala Arg Trp Leu Leu Pro Gln Leu Val Tyr Leu Gln Gly
100 105 110

Trp Gly Ser Tyr Ser Leu Leu Arg Pro Ala Ala Leu Ile Ser Met Val
115 120 125

Leu Leu Ala Arg Glu Phe Leu Tyr Pro Ala Lys Met Ser Val Ser Glu
130 135 140

Val Cys Ser Ser Gly Leu Ser Ser Pro Leu Leu Glu Gln His Lys Thr
145 150 155 160

Asn Leu Ile Phe Tyr Ala Ser Gly Asp Ile Cys Ser Ala Asn Gly Lys
165 170 175

Ser Gly Phe Asn Gln Pro Leu Pro Phe Leu Lys Thr Phe Cys Ser Thr
180 185 190

His Arg Ile Leu Ser Cys Thr Tyr Leu
195 200

<210> 2952
<211> 492
<212> PRT
<213> Homo sapiens

<400> 2952

Met Ser Asp Tyr Glu Asn Asp Asp Glu Cys Trp Ser Val Leu Glu Gly
1 5 10 15

Phe Arg Val Thr Leu Thr Ser Val Ile Asp Pro Ser Arg Ile Thr Pro

20										25										30											
Tyr	Leu	Arg	Gln	Cys	Lys	Val	Leu	Asn	Pro	Asp	Asp	Glu	Glu	Gln	Val																
		35						40					45																		
Leu	Ser	Asp	Pro	Asn	Leu	Val	Ile	Arg	Lys	Arg	Lys	Val	Gly	Val	Leu																
		50				55						60																			
Leu	Asp	Ile	Leu	Gln	Arg	Thr	Gly	His	Lys	Gly	Tyr	Val	Ala	Phe	Leu																
		65			70					75					80																
Glu	Ser	Leu	Glu	Leu	Tyr	Tyr	Pro	Gln	Leu	Tyr	Lys	Lys	Val	Thr	Gly																
				85					90					95																	
Lys	Glu	Pro	Ala	Arg	Val	Phe	Ser	Met	Ile	Ile	Asp	Ala	Ser	Gly	Glu																
			100					105					110																		
Ser	Gly	Leu	Thr	Gln	Leu	Leu	Met	Thr	Glu	Val	Met	Lys	Leu	Gln	Lys																
		115					120					125																			
Lys	Val	Gln	Asp	Leu	Thr	Ala	Leu	Leu	Ser	Ser	Lys	Asp	Asp	Phe	Ile																
		130				135					140																				
Lys	Glu	Leu	Arg	Val	Lys	Asp	Ser	Leu	Leu	Arg	Lys	His	Gln	Glu	Arg																
		145			150					155				160																	
Val	Gln	Arg	Leu	Lys	Glu	Glu	Cys	Glu	Ala	Gly	Ser	Arg	Glu	Leu	Lys																
			165					170						175																	
Arg	Cys	Lys	Glu	Glu	Asn	Tyr	Asp	Leu	Ala	Met	Arg	Leu	Ala	His	Gln																
			180					185					190																		
Ser	Glu	Glu	Lys	Gly	Ala	Ala	Leu	Met	Arg	Asn	Arg	Asp	Leu	Gln	Leu																
		195					200					205																			
Glu	Ile	Asp	Gln	Leu	Lys	His	Ser	Leu	Met	Lys	Ala	Glu	Asp	Asp	Cys																
		210				215					220																				
Lys	Val	Glu	Arg	Lys	His	Thr	Leu	Lys	Leu	Arg	His	Ala	Met	Glu	Gln																
		225			230					235				240																	
Arg	Pro	Ser	Gln	Glu	Leu	Leu	Trp	Glu	Leu	Gln	Gln	Glu	Lys	Ala	Leu																
			245					250					255																		
Leu	Gln	Ala	Arg	Val	Gln	Glu	Leu	Glu	Ala	Ser	Val	Gln	Glu	Gly	Lys																
		260						265					270																		

Leu Asp Arg Ser Ser Pro Tyr Ile Gln Val Leu Glu Glu Asp Trp Arg
 275 280 285

Gln Ala Leu Arg Asp His Gln Glu Gln Ala Asn Thr Ile Phe Ser Leu
 290 295 300

Arg Lys Asp Leu Arg Gln Gly Glu Ala Arg Arg Leu Arg Cys Met Glu
 305 310 315 320

Glu Lys Glu Met Phe Glu Leu Gln Cys Leu Ala Leu Arg Lys Asp Ser
 325 330 335

Lys Met Tyr Lys Asp Arg Ile Glu Ala Ile Leu Leu Gln Met Glu Glu
 340 345 350

Val Ala Ile Glu Arg Asp Gln Ala Ile Ala Thr Arg Glu Glu Leu His
 355 360 365

Ala Gln His Ala Arg Gly Leu Gln Glu Lys Asp Ala Leu Arg Lys Gln
 370 375 380

Val Arg Glu Leu Gly Glu Lys Ala Asp Glu Leu Gln Leu Gln Val Phe
 385 390 395 400

Gln Cys Glu Ala Gln Leu Leu Ala Val Glu Gly Arg Leu Arg Arg Gln
 405 410 415

Gln Leu Glu Thr Leu Val Leu Ser Ser Asp Leu Glu Asp Gly Ser Pro
 420 425 430

Arg Arg Ser Gln Glu Leu Ser Leu Pro Gln Asp Leu Glu Asp Thr Gln
 435 440 445

Leu Ser Asp Lys Gly Cys Leu Ala Gly Gly Gly Ser Pro Lys Gln Pro
 450 455 460

Phe Ala Ala Leu His Gln Glu Gln Val Leu Arg Asn Pro His Asp Ala
 465 470 475 480

Gly Pro Ala Gly Leu Pro Gly Ile Gly Ala Val Cys
 485 490

<210> 2953

<211> 92

<212> PRT

<213> Homo sapiens

<400> 2953

Met Lys Leu Cys Val Thr Val Leu Ser Leu Leu Met Leu Val Ala Ala
 1 5 10 15

Phe Cys Ser Pro Ala Leu Ser Ala Pro Met Gly Ser Asp Pro Pro Thr
 20 25 30

Ala Cys Cys Phe Ser Tyr Thr Ala Arg Lys Leu Pro Arg Asn Phe Val
 35 40 45

Val Asp Tyr Tyr Glu Thr Ser Ser Leu Cys Ser Gln Pro Ala Val Val
 50 55 60

Phe Gln Thr Lys Arg Ser Lys Gln Val Cys Ala Asp Pro Ser Glu Ser
 65 70 75 80

Trp Val Gln Glu Tyr Val Tyr Asp Leu Glu Leu Asn
 85 90

<210> 2954

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2954

Met Val Cys Leu Lys Leu Pro Gly Gly Ser Cys Met Thr Ala Leu Thr
 1 5 10 15

Val Thr Leu Met Val Leu Ser Ser Pro Leu Ala Leu Ala Gly Asp Thr
 20 25 30

Arg Pro Arg Phe Leu Trp Gln Leu Lys Phe Glu Cys His Phe Phe Asn
 35 40 45

Gly Thr Glu Arg Val Arg Leu Leu Glu Arg Cys Ile Tyr Asn Gln Glu
 50 55 60

Glu Ser Val Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr
 65 70 75 80

Glu Leu Gly Arg Pro Asp Ala Glu Tyr Trp Asn Ser Gln Lys Asp Leu
 85 90 95

Leu Glu Gln Arg Arg Ala Ala Val Asp Thr Tyr Cys Arg His Asn Tyr
 100 105 110

Gly Val Gly Glu Ser Phe Thr Val Gln Arg Arg Val Glu Pro Lys Val
 115 120 125

Thr Val Tyr Pro Ser Lys Thr Gln Pro Leu Gln His His Asn Leu Leu
 130 135 140

Val Cys Ser Val Ser Gly Phe Tyr Pro Gly Ser Ile Glu Val Arg Trp
 145 150 155 160

Phe Arg Asn Gly Gln Glu Glu Lys Ala Gly Val Val Ser Thr Gly Leu
 165 170 175

Ile Gln Asn Gly Asp Trp Thr Phe Gln Thr Leu Val Met Leu Glu Thr
 180 185 190

Val Pro Arg Ser Gly Glu Val Tyr Thr Cys Gln Val Glu His Pro Ser
 195 200 205

Val Thr Ser Pro Leu Thr Val Glu Trp Arg Ala Arg Ser Glu Ser Ala
 210 215 220

Gln Ser Lys Met Leu Ser Gly Val Gly Gly Phe Val Leu Gly Leu Leu
 225 230 235 240

Phe Leu Gly Ala Gly Leu Phe Ile Tyr Phe Arg Asn Gln Lys Gly His
 245 250 255

Ser Gly Leu Gln Pro Thr Gly Phe Leu Ser
 260 265

<210> 2955
 <211> 359
 <212> PRT
 <213> Homo sapiens

<400> 2955

Met Ala Glu Ala Ile Thr Tyr Ala Asp Leu Arg Phe Val Lys Ala Pro
 1 5 10 15

Leu Lys Lys Ser Ile Ser Ser Arg Leu Gly Gln Asp Pro Gly Ala Asp
 20 25 30

Asp Asp Gly Glu Ile Thr Tyr Glu Asn Val Gln Val Pro Ala Val Leu
 35 40 45

Gly Val Pro Ser Ser Leu Ala Ser Ser Val Leu Gly Asp Lys Ala Ala
 50 55 60

Val Lys Ser Glu Gln Pro Thr Ala Ser Trp Arg Ala Val Thr Ser Pro
 65 70 75 80

Ala Val Gly Arg Ile Leu Pro Cys Arg Thr Thr Cys Leu Arg Tyr Leu
 85 90 95

Leu Leu Gly Leu Leu Leu Thr Cys Leu Leu Leu Gly Val Thr Ala Ile
 100 105 110

Cys Leu Gly Val Arg Tyr Leu Gln Val Ser Gln Gln Leu Gln Gln Thr
 115 120 125

Asn Arg Val Leu Glu Val Thr Asn Ser Ser Leu Arg Gln Gln Leu Arg
 130 135 140

Leu Lys Ile Thr Gln Leu Gly Gln Ser Ala Glu Asp Leu Gln Gly Ser
 145 150 155 160

Arg Arg Glu Leu Ala Gln Ser Gln Glu Ala Leu Gln Val Glu Gln Arg
 165 170 175

Ala His Gln Ala Ala Glu Gly Gln Leu Gln Ala Cys Gln Ala Asp Arg
 180 185 190

Gln Lys Thr Lys Glu Thr Leu Gln Ser Glu Glu Gln Gln Arg Arg Ala
 195 200 205

Leu Glu Gln Lys Leu Ser Asn Met Glu Asn Arg Leu Lys Pro Phe Phe
 210 215 220

Thr Cys Gly Ser Ala Asp Thr Cys Cys Pro Ser Gly Trp Ile Met His
 225 230 235 240

Gln Lys Ser Cys Phe Tyr Ile Ser Leu Thr Ser Lys Asn Trp Gln Glu
 245 250 255

Ser Gln Lys Gln Cys Glu Thr Leu Ser Ser Lys Leu Ala Thr Phe Ser
 260 265 270

Glu Ile Tyr Pro Gln Ser His Ser Tyr Tyr Phe Leu Asn Ser Leu Leu
 275 280 285

Pro Asn Gly Gly Ser Gly Asn Ser Tyr Trp Thr Gly Leu Ser Ser Asn

290

295

300

Lys Asp Trp Lys Leu Thr Asp Asp Thr Gln Arg Thr Arg Thr Tyr Ala
 305 310 315 320

Gln Ser Ser Lys Cys Asn Lys Val His Lys Thr Trp Ser Trp Trp Thr
 325 330 335

Leu Glu Ser Glu Ser Cys Arg Ser Ser Leu Pro Tyr Ile Cys Glu Met
 340 345 350

Thr Ala Phe Arg Phe Pro Asp
 355

<210> 2956
 <211> 643
 <212> PRT
 <213> Homo sapiens

<400> 2956

Met Gln Ala Pro Arg Glu Leu Ala Val Gly Ile Asp Leu Gly Thr Thr
 1 5 10 15

Tyr Ser Cys Val Gly Val Phe Gln Gln Gly Arg Val Glu Ile Leu Ala
 20 25 30

Asn Asp Gln Gly Asn Arg Thr Thr Pro Ser Tyr Val Ala Phe Thr Asp
 35 40 45

Thr Glu Arg Leu Val Gly Asp Ala Ala Lys Ser Gln Ala Ala Leu Asn
 50 55 60

Pro His Asn Thr Val Phe Asp Ala Lys Arg Leu Ile Gly Arg Lys Phe
 65 70 75 80

Ala Asp Thr Thr Val Gln Ser Asp Met Lys His Trp Pro Phe Arg Val
 85 90 95

Val Ser Glu Gly Gly Lys Pro Lys Val Pro Val Ser Tyr Arg Gly Glu
 100 105 110

Asp Lys Thr Phe Tyr Pro Glu Glu Ile Ser Ser Met Val Leu Ser Lys
 115 120 125

Met Lys Glu Thr Ala Glu Ala Tyr Leu Gly Gln Pro Val Lys His Ala
 130 135 140

Val Ile Thr Val Pro Ala Tyr Phe Asn Asp Ser Gln Arg Gln Ala Thr
 145 150 155 160
 Lys Asp Ala Gly Ala Ile Ala Gly Leu Asn Val Leu Arg Ile Ile Asn
 165 170 175
 Glu Pro Thr Ala Ala Ala Ile Ala Tyr Gly Leu Asp Arg Arg Gly Ala
 180 185 190
 Gly Glu Arg Asn Val Leu Ile Phe Asp Leu Gly Gly Gly Thr Phe Asp
 195 200 205
 Val Ser Val Leu Ser Ile Asp Ala Gly Val Phe Glu Val Lys Ala Thr
 210 215 220
 Ala Gly Asp Thr His Leu Gly Gly Glu Asp Phe Asp Asn Arg Leu Val
 225 230 235 240
 Asn His Phe Met Glu Glu Phe Arg Arg Lys His Gly Lys Asp Leu Ser
 245 250 255
 Gly Asn Lys Arg Ala Leu Gly Arg Leu Arg Thr Ala Cys Glu Arg Ala
 260 265 270
 Lys Arg Thr Leu Ser Ser Ser Thr Gln Ala Thr Leu Glu Ile Asp Ser
 275 280 285
 Leu Phe Glu Gly Val Asp Phe Tyr Thr Ser Ile Thr Arg Ala Arg Phe
 290 295 300
 Glu Glu Leu Cys Ser Asp Leu Phe Arg Ser Thr Leu Glu Pro Val Glu
 305 310 315 320
 Lys Ala Leu Arg Asp Ala Lys Leu Asp Lys Ala Gln Ile His Asp Val
 325 330 335
 Val Leu Val Gly Gly Ser Thr Arg Ile Pro Lys Val Gln Lys Leu Leu
 340 345 350
 Gln Asp Phe Phe Asn Gly Lys Glu Leu Asn Lys Ser Ile Asn Pro Asp
 355 360 365
 Glu Ala Val Ala Tyr Gly Ala Ala Val Gln Ala Ala Val Leu Met Gly
 370 375 380

Asp Lys Cys Glu Lys Val Gln Asp Leu Leu Leu Leu Asp Val Ala Pro
 385 390 395 400

Leu Ser Leu Gly Leu Glu Thr Ala Gly Gly Val Met Thr Thr Leu Ile
 405 410 415

Gln Arg Asn Ala Thr Ile Pro Thr Lys Gln Thr Gln Thr Phe Thr Thr
 420 425 430

Tyr Ser Asp Asn Gln Pro Gly Val Phe Ile Gln Val Tyr Glu Gly Glu
 435 440 445

Arg Ala Met Thr Lys Asp Asn Asn Leu Leu Gly Arg Phe Glu Leu Ser
 450 455 460

Gly Ile Pro Pro Ala Pro Arg Gly Val Pro Gln Ile Glu Val Thr Phe
 465 470 475 480

Asp Ile Asp Ala Asn Gly Ile Leu Ser Val Thr Ala Thr Asp Arg Ser
 485 490 495

Thr Gly Lys Ala Asn Lys Ile Thr Ile Thr Asn Asp Lys Gly Arg Leu
 500 505 510

Ser Lys Glu Glu Val Glu Arg Met Val His Glu Ala Glu Gln Tyr Lys
 515 520 525

Ala Glu Asp Glu Ala Gln Arg Asp Arg Val Ala Ala Lys Asn Ser Leu
 530 535 540

Glu Ala His Val Phe His Val Lys Gly Ser Leu Gln Glu Glu Ser Leu
 545 550 555 560

Arg Asp Lys Ile Pro Glu Glu Asp Arg Arg Lys Met Gln Asp Lys Cys
 565 570 575

Arg Glu Val Leu Ala Trp Leu Glu His Asn Gln Leu Ala Glu Lys Glu
 580 585 590

Glu Tyr Glu His Gln Lys Arg Glu Leu Glu Gln Ile Cys Arg Pro Ile
 595 600 605

Phe Ser Arg Leu Tyr Gly Gly Pro Gly Val Pro Gly Gly Ser Ser Cys
 610 615 620

Gly Thr Gln Ala Arg Gln Gly Asp Pro Ser Thr Gly Pro Ile Ile Glu

625

630

635

640

Glu Val Asp

<210> 2957

<211> 565

<212> PRT

<213> Homo sapiens

<400> 2957

Met Ala Glu Gly Lys Ala Gly Gly Ala Ala Gly Leu Phe Ala Lys Gln
 1 5 10 15

Val Gln Lys Lys Phe Ser Arg Ala Gln Glu Lys Val Leu Gln Lys Leu
 20 25 30

Gly Lys Ala Val Glu Thr Lys Asp Glu Arg Phe Glu Gln Ser Ala Asn
 35 40 45

Asn Phe Tyr Gln Gln Gln Ala Glu Gly His Lys Leu Tyr Lys Asp Leu
 50 55 60

Lys Asn Phe Leu Ser Ala Val Lys Val Met His Glu Ser Ser Lys Arg
 65 70 75 80

Val Ser Glu Thr Leu Gln Glu Ile Tyr Ser Ser Glu Trp Asp Gly His
 85 90 95

Glu Glu Leu Lys Ala Ile Val Trp Asn Asn Asp Leu Leu Trp Glu Asp
 100 105 110

Tyr Glu Glu Lys Leu Ala Asp Gln Ala Val Arg Thr Met Glu Ile Tyr
 115 120 125

Val Ala Gln Phe Ser Glu Ile Lys Glu Arg Ile Ala Lys Arg Gly Arg
 130 135 140

Lys Leu Val Asp Tyr Asp Ser Ala Arg His His Leu Glu Ala Val Gln
 145 150 155 160

Asn Ala Lys Lys Lys Asp Glu Ala Lys Thr Ala Lys Ala Glu Glu Glu
 165 170 175

Phe Asn Lys Ala Gln Thr Val Phe Glu Asp Leu Asn Gln Glu Leu Leu
 180 185 190

Glu Glu Leu Pro Ile Leu Tyr Asn Ser Arg Ile Gly Cys Tyr Val Thr
 195 200 205

Ile Phe Gln Asn Ile Ser Asn Leu Arg Asp Val Phe Tyr Arg Glu Met
 210 215 220

Ser Lys Leu Asn His Asn Leu Tyr Glu Val Met Ser Lys Leu Glu Lys
 225 230 235 240

Gln His Ser Asn Lys Val Phe Val Val Lys Gly Leu Ser Ser Ser Ser
 245 250 255

Arg Arg Ser Leu Val Ile Ser Pro Pro Val Arg Thr Ala Thr Val Ser
 260 265 270

Ser Pro Leu Thr Ser Pro Thr Ser Pro Ser Thr Leu Ser Leu Lys Ser
 275 280 285

Glu Ser Glu Ser Val Ser Ala Thr Glu Asp Leu Ala Pro Asp Ala Ala
 290 295 300

Gln Gly Glu Asp Asn Ser Glu Ile Lys Glu Leu Leu Glu Glu Glu Glu
 305 310 315 320

Ile Glu Lys Glu Gly Ser Glu Ala Ser Ser Ser Glu Glu Asp Glu Pro
 325 330 335

Leu Pro Ala Cys Asn Gly Pro Ala Gln Ala Gln Pro Ser Pro Thr Thr
 340 345 350

Glu Arg Ala Lys Ser Gln Glu Glu Val Leu Pro Ser Ser Thr Thr Pro
 355 360 365

Ser Pro Gly Gly Ala Leu Ser Pro Ser Gly Gln Pro Ser Ser Ser Ala
 370 375 380

Thr Glu Val Val Leu Arg Thr Arg Thr Ala Ser Glu Gly Ser Glu Gln
 385 390 395 400

Pro Lys Lys Arg Ala Ser Ile Gln Arg Thr Ser Ala Pro Pro Ser Arg
 405 410 415

Pro Pro Pro Pro Arg Ala Thr Ala Ser Pro Arg Pro Ser Ser Gly Asn
 420 425 430

Ile Pro Ser Ser Pro Thr Ala Ser Gly Gly Gly Ser Pro Thr Ser Pro
 435 440 445

Arg Ala Ser Leu Gly Thr Gly Thr Ala Ser Pro Arg Thr Ser Leu Glu
 450 455 460

Val Ser Pro Asn Pro Glu Pro Pro Glu Lys Pro Val Arg Thr Pro Glu
 465 470 475 480

Ala Lys Glu Asn Glu Asn Ile His Asn Gln Asn Pro Glu Glu Leu Cys
 485 490 495

Thr Ser Pro Thr Leu Met Thr Ser Gln Val Ala Ser Glu Pro Gly Glu
 500 505 510

Ala Lys Lys Met Glu Asp Lys Glu Lys Asp Asn Lys Leu Ile Ser Ala
 515 520 525

Asp Ser Ser Glu Gly Gln Asp Gln Leu Gln Val Ser Met Val Pro Glu
 530 535 540

Asn Asn Asn Leu Thr Ala Pro Glu Pro Gln Glu Glu Val Ser Thr Ser
 545 550 555 560

Glu Asn Pro Gln Leu
 565

<210> 2958
 <211> 349
 <212> PRT
 <213> Homo sapiens

<400> 2958

Met Glu Thr Pro Pro Val Asn Thr Ile Gly Glu Lys Asp Thr Ser Gln
 1 5 10 15

Pro Gln Gln Glu Trp Glu Lys Asn Leu Arg Glu Asn Leu Asp Ser Val
 20 25 30

Ile Gln Ile Arg Gln Gln Pro Arg Asp Pro Pro Thr Glu Thr Leu Glu
 35 40 45

Leu Glu Val Ser Pro Asp Pro Ala Ser Gln Ile Leu Glu His Thr Gln
 50 55 60

Gly Ala Glu Lys Leu Val Ala Glu Leu Glu Gly Asp Ser His Lys Ser
 65 70 75 80

Ala Thr Ala Asp Leu Lys Lys Val Leu Ala Ile Asp Pro Lys Asn Arg
305 310 315 320

	180		185		190												
Arg	Arg	Asn	Glu	Glu	Tyr	Cys	Leu	Leu	Asp	Ser	Ser	Glu	Ile	His	Trp		
	195						200					205					
Trp	Arg	Val	Gln	Asp	Arg	Asn	Gly	His	Glu	Gly	Tyr	Val	Pro	Ser	Ser		
	210					215					220						
Tyr	Leu	Val	Glu	Lys	Ser	Pro	Asn	Asn	Leu	Glu	Thr	Tyr	Glu	Trp	Tyr		
225					230					235					240		
Asn	Lys	Ser	Ile	Ser	Arg	Asp	Lys	Ala	Glu	Lys	Leu	Leu	Leu	Asp	Thr		
				245					250					255			
Gly	Lys	Glu	Gly	Ala	Phe	Met	Val	Arg	Asp	Ser	Arg	Thr	Ala	Gly	Thr		
			260					265					270				
Tyr	Thr	Val	Ser	Val	Phe	Thr	Lys	Ala	Val	Val	Ser	Glu	Asn	Asn	Pro		
	275						280					285					
Cys	Ile	Lys	His	Tyr	His	Ile	Lys	Glu	Thr	Asn	Asp	Asn	Pro	Lys	Arg		
	290					295					300						
Tyr	Tyr	Val	Ala	Glu	Lys	Tyr	Val	Phe	Asp	Ser	Ile	Pro	Leu	Leu	Ile		
305					310					315					320		
Asn	Tyr	His	Gln	His	Asn	Gly	Gly	Gly	Leu	Val	Thr	Arg	Leu	Arg	Tyr		
				325					330					335			
Pro	Val	Cys	Phe	Gly	Arg	Gln	Lys	Ala	Pro	Val	Thr	Ala	Gly	Leu	Arg		
			340					345					350				
Tyr	Gly	Lys	Trp	Val	Ile	Asp	Pro	Ser	Glu	Leu	Thr	Phe	Val	Gln	Glu		
		355					360					365					
Ile	Gly	Ser	Gly	Gln	Phe	Gly	Leu	Val	His	Leu	Gly	Tyr	Trp	Leu	Asn		
	370					375					380						
Lys	Asp	Lys	Val	Ala	Ile	Lys	Thr	Ile	Arg	Glu	Gly	Ala	Met	Ser	Glu		
385					390					395					400		
Glu	Asp	Phe	Ile	Glu	Glu	Ala	Glu	Val	Met	Met	Lys	Leu	Ser	His	Pro		
				405					410					415			
Lys	Leu	Val	Gln	Leu	Tyr	Gly	Val	Cys	Leu	Glu	Gln	Ala	Pro	Ile	Cys		
			420					425					430				

Leu Val Phe Glu Phe Met Glu His Gly Cys Leu Ser Asp Tyr Leu Arg
 435 440 445

Thr Gln Arg Gly Leu Phe Ala Ala Glu Thr Leu Leu Gly Met Cys Leu
 450 455 460

Asp Val Cys Glu Gly Met Ala Tyr Leu Glu Glu Ala Cys Val Ile His
 465 470 475 480

Arg Asp Leu Ala Ala Arg Asn Cys Leu Val Gly Glu Asn Gln Val Ile
 485 490 495

Lys Val Ser Asp Phe Gly Met Thr Arg Phe Val Leu Asp Asp Gln Tyr
 500 505 510

Thr Ser Ser Thr Gly Thr Lys Phe Pro Val Lys Trp Ala Ser Pro Glu
 515 520 525

Val Phe Ser Phe Ser Arg Tyr Ser Ser Lys Ser Asp Val Trp Ser Phe
 530 535 540

Gly Val Leu Met Trp Glu Val Phe Ser Glu Gly Lys Ile Pro Tyr Glu
 545 550 555 560

Asn Arg Ser Asn Ser Glu Val Val Glu Asp Ile Ser Thr Gly Phe Arg
 565 570 575

Leu Tyr Lys Pro Arg Leu Ala Ser Thr His Val Tyr Gln Ile Met Asn
 580 585 590

His Cys Trp Lys Glu Arg Pro Glu Asp Arg Pro Ala Phe Ser Arg Leu
 595 600 605

Leu Arg Gln Leu Ala Glu Ile Ala Glu Ser Gly Leu
 610 615 620

<210> 2960

<211> 262

<212> PRT

<213> Homo sapiens

<400> 2960

Met Asp Pro Arg Leu Ser Thr Val Arg Gln Thr Cys Cys Cys Phe Asn
 1 5 10 15

Val Arg Ile Ala Thr Thr Ala Leu Ala Ile Tyr His Val Ile Met Ser
20 25 30

Val Leu Leu Phe Ile Glu His Ser Val Glu Val Ala His Gly Lys Ala
35 40 45

Ser Cys Lys Leu Ser Gln Met Gly Tyr Leu Arg Ile Ala Asp Leu Ile
50 55 60

Ser Ser Phe Leu Leu Ile Thr Met Leu Phe Ile Ile Ser Leu Ser Leu
65 70 75 80

Leu Ile Gly Val Val Lys Asn Arg Glu Lys Tyr Leu Leu Pro Phe Leu
85 90 95

Ser Leu Gln Ile Met Asp Tyr Leu Leu Cys Leu Leu Thr Leu Leu Gly
100 105 110

Ser Tyr Ile Glu Leu Pro Ala Tyr Leu Lys Leu Ala Ser Arg Ser Arg
115 120 125

Ala Ser Ser Ser Lys Phe Pro Leu Met Thr Leu Gln Leu Leu Asp Phe
130 135 140

Cys Leu Ser Ile Leu Thr Leu Cys Ser Ser Tyr Met Glu Val Pro Thr
145 150 155 160

Tyr Leu Asn Phe Lys Ser Met Asn His Met Asn Tyr Leu Pro Ser Gln
165 170 175

Glu Asp Met Pro His Asn Gln Phe Ile Lys Met Met Ile Ile Phe Ser
180 185 190

Ile Ala Phe Ile Thr Val Leu Ile Phe Lys Val Tyr Met Phe Lys Cys
195 200 205

Val Trp Arg Cys Tyr Arg Leu Ile Lys Cys Met Asn Ser Val Glu Glu
210 215 220

Lys Arg Asn Ser Lys Met Leu Gln Lys Val Val Leu Pro Ser Tyr Glu
225 230 235 240

Glu Ala Leu Ser Leu Pro Ser Lys Thr Pro Glu Gly Gly Pro Ala Pro
245 250 255

Pro Pro Tyr Ser Glu Val

260

<210> 2961
 <211> 467
 <212> PRT
 <213> Homo sapiens

<400> 2961

Met Gln Met Asp Asn Arg Leu Pro Pro Lys Lys Val Pro Gly Phe Cys
 1 5 10 15

Ser Phe Arg Tyr Gly Leu Ser Phe Leu Val His Cys Cys Asn Val Ile
 20 25 30

Ile Thr Ala Gln Arg Ala Cys Leu Asn Leu Thr Met Val Val Met Val
 35 40 45

Asn Ser Thr Asp Pro His Gly Leu Pro Asn Thr Ser Thr Lys Lys Leu
 50 55 60

Leu Asp Asn Ile Lys Asn Pro Met Tyr Asn Trp Ser Pro Asp Ile Gln
 65 70 75 80

Gly Ile Ile Leu Ser Ser Thr Ser Tyr Gly Val Ile Ile Ile Gln Val
 85 90 95

Pro Val Gly Tyr Phe Ser Gly Ile Tyr Ser Thr Lys Lys Met Ile Gly
 100 105 110

Phe Ala Leu Cys Leu Ser Ser Val Leu Ser Leu Leu Ile Pro Pro Ala
 115 120 125

Ala Gly Ile Gly Val Ala Trp Val Val Val Cys Arg Ala Val Gln Gly
 130 135 140

Ala Ala Gln Gly Ile Val Ala Thr Ala Gln Phe Glu Ile Tyr Val Lys
 145 150 155 160

Trp Ala Pro Pro Leu Glu Arg Gly Arg Leu Thr Ser Met Ser Thr Ser
 165 170 175

Gly Phe Leu Leu Gly Pro Phe Ile Val Leu Leu Val Thr Gly Val Ile
 180 185 190

Cys Glu Ser Leu Gly Trp Pro Met Val Phe Tyr Ile Phe Gly Ala Cys
 195 200 205

Gly Cys Ala Val Cys Leu Leu Trp Phe Val Leu Phe Tyr Asp Asp Pro
 210 215 220

Lys Asp His Pro Cys Ile Ser Ile Ser Glu Lys Glu Tyr Ile Thr Ser
 225 230 235 240

Ser Leu Val Gln Gln Val Ser Ser Ser Arg Gln Ser Leu Pro Ile Lys
 245 250 255

Ala Ile Leu Lys Ser Leu Pro Val Trp Ala Ile Ser Ile Gly Ser Phe
 260 265 270

Thr Phe Phe Trp Ser His Asn Ile Met Thr Leu Tyr Thr Pro Met Phe
 275 280 285

Ile Asn Ser Met Leu His Val Asn Ile Lys Glu Asn Gly Phe Leu Ser
 290 295 300

Ser Leu Pro Tyr Leu Phe Ala Trp Ile Cys Gly Asn Leu Ala Gly Gln
 305 310 315 320

Leu Ser Asp Phe Phe Leu Thr Arg Asn Ile Leu Ser Val Ile Ala Val
 325 330 335

Arg Lys Leu Phe Thr Ala Ala Gly Phe Leu Leu Pro Ala Ile Phe Gly
 340 345 350

Val Cys Leu Pro Tyr Leu Ser Ser Thr Phe Tyr Ser Ile Val Ile Phe
 355 360 365

Leu Ile Leu Ala Gly Ala Thr Gly Ser Phe Cys Leu Gly Gly Val Phe
 370 375 380

Ile Asn Gly Leu Asp Ile Ala Pro Arg Tyr Phe Gly Phe Ile Lys Ala
 385 390 395 400

Cys Ser Thr Leu Thr Gly Met Ile Gly Gly Leu Ile Ala Ser Thr Leu
 405 410 415

Thr Gly Leu Ile Leu Lys Gln Asp Pro Glu Ser Ala Trp Phe Lys Thr
 420 425 430

Phe Ile Leu Met Ala Ala Ile Asn Val Thr Gly Leu Ile Phe Tyr Leu
 435 440 445

Ile Val Ala Thr Ala Glu Ile Gln Asp Trp Ala Lys Glu Lys Gln His
 450 455 460

Thr Arg Leu
 465

<210> 2962
 <211> 444
 <212> PRT
 <213> Homo sapiens

<400> 2962

Met Val Ser Gln Ala Leu Arg Leu Leu Cys Leu Leu Leu Gly Leu Gln
 1 5 10 15

Gly Cys Leu Ala Ala Val Phe Val Thr Gln Glu Glu Ala His Gly Val
 20 25 30

Leu His Arg Arg Arg Arg Ala Asn Ala Phe Leu Glu Glu Leu Arg Pro
 35 40 45

Gly Ser Leu Glu Arg Glu Cys Lys Glu Glu Gln Cys Ser Phe Glu Glu
 50 55 60

Ala Arg Glu Ile Phe Lys Asp Ala Glu Arg Thr Lys Leu Phe Trp Ile
 65 70 75 80

Ser Tyr Ser Asp Gly Asp Gln Cys Ala Ser Ser Pro Cys Gln Asn Gly
 85 90 95

Gly Ser Cys Lys Asp Gln Leu Gln Ser Tyr Ile Cys Phe Cys Leu Pro
 100 105 110

Ala Phe Glu Gly Arg Asn Cys Glu Thr His Lys Asp Asp Gln Leu Ile
 115 120 125

Cys Val Asn Glu Asn Gly Gly Cys Glu Gln Tyr Cys Ser Asp His Thr
 130 135 140

Gly Thr Lys Arg Ser Cys Arg Cys His Glu Gly Tyr Ser Leu Leu Ala
 145 150 155 160

Asp Gly Val Ser Cys Thr Pro Thr Val Glu Tyr Pro Cys Gly Lys Ile
 165 170 175

Pro Ile Leu Glu Lys Arg Asn Ala Ser Lys Pro Gln Gly Arg Ile Val
 180 185 190

Gly Gly Lys Val Cys Pro Lys Gly Glu Cys Pro Trp Gln Val Leu Leu
 195 200 205

Leu Val Asn Gly Ala Gln Leu Cys Gly Gly Thr Leu Ile Asn Thr Ile
 210 215 220

Trp Val Val Ser Ala Ala His Cys Phe Asp Lys Ile Lys Asn Trp Arg
 225 230 235 240

Asn Leu Ile Ala Val Leu Gly Glu His Asp Leu Ser Glu His Asp Gly
 245 250 255

Asp Glu Gln Ser Arg Arg Val Ala Gln Val Ile Ile Pro Ser Thr Tyr
 260 265 270

Val Pro Gly Thr Thr Asn His Asp Ile Ala Leu Leu Arg Leu His Gln
 275 280 285

Pro Val Val Leu Thr Asp His Val Val Pro Leu Cys Leu Pro Glu Arg
 290 295 300

Thr Phe Ser Glu Arg Thr Leu Ala Phe Val Arg Phe Ser Leu Val Ser
 305 310 315 320

Gly Trp Gly Gln Leu Leu Asp Arg Gly Ala Thr Ala Leu Glu Leu Met
 325 330 335

Val Leu Asn Val Pro Arg Leu Met Thr Gln Asp Cys Leu Gln Gln Ser
 340 345 350

Arg Lys Val Gly Asp Ser Pro Asn Ile Thr Glu Tyr Met Phe Cys Ala
 355 360 365

Gly Tyr Ser Asp Gly Ser Lys Asp Ser Cys Lys Gly Asp Ser Gly Gly
 370 375 380

Pro His Ala Thr His Tyr Arg Gly Thr Trp Tyr Leu Thr Gly Ile Val
 385 390 395 400

Ser Trp Gly Gln Gly Cys Ala Thr Val Gly His Phe Gly Val Tyr Thr
 405 410 415

Arg Val Ser Gln Tyr Ile Glu Trp Leu Gln Lys Leu Met Arg Ser Glu
 420 425 430

Pro Arg Pro Gly Val Leu Leu Arg Ala Pro Phe Pro
 435 440

<210> 2963
 <211> 272
 <212> PRT
 <213> Homo sapiens

<400> 2963

Arg Cys Lys Pro Ile Ser Gly His Asn Ser Leu Phe Trp Tyr Arg Gln
 1 5 10 15

Thr Met Met Arg Gly Leu Glu Leu Leu Ile Tyr Phe Asn Asn Asn Val
 20 25 30

Pro Ile Asp Asp Ser Gly Met Pro Glu Asp Arg Phe Ser Ala Lys Met
 35 40 45

Pro Asn Ala Ser Phe Ser Thr Leu Lys Ile Gln Pro Ser Glu Pro Arg
 50 55 60

Asp Ser Ala Val Tyr Phe Cys Ala Ser Ser Phe Ser Thr Cys Ser Ala
 65 70 75 80

Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Arg Leu Thr Val Val Glu
 85 90 95

Asp Leu Asn Lys Val Phe Pro Pro Glu Val Ala Val Phe Glu Pro Ser
 100 105 110

Glu Ala Glu Ile Ser His Thr Gln Lys Ala Thr Leu Val Cys Leu Ala
 115 120 125

Thr Gly Phe Phe Pro Asp His Val Glu Leu Ser Trp Trp Val Asn Gly
 130 135 140

Lys Glu Val His Ser Gly Val Ser Thr Asp Pro Gln Pro Leu Lys Glu
 145 150 155 160

Gln Pro Ala Leu Asn Asp Ser Arg Tyr Cys Leu Ser Ser Arg Leu Arg
 165 170 175

Val Ser Ala Thr Phe Trp Gln Asn Pro Arg Asn His Phe Arg Cys Gln
 180 185 190

Val Gln Phe Tyr Gly Leu Ser Glu Asn Asp Glu Trp Thr Gln Asp Arg

195

200

205

Ala Lys Pro Val Thr Gln Ile Val Ser Ala Glu Ala Trp Gly Arg Ala
 210 215 220

Asp Cys Gly Phe Thr Ser Val Ser Tyr Gln Gln Gly Val Leu Ser Ala
 225 230 235 240

Thr Ile Leu Tyr Glu Ile Leu Leu Gly Lys Ala Thr Leu Tyr Ala Val
 245 250 255

Leu Val Ser Ala Leu Val Leu Met Ala Met Val Lys Arg Lys Asp Phe
 260 265 270

<210> 2964
 <211> 276
 <212> PRT
 <213> Homo sapiens

<400> 2964

Met Tyr Arg Ile Ser Gln Leu Met Ser Thr Pro Val Ala Ser Ser Ser
 1 5 10 15

Arg Leu Glu Arg Glu Tyr Ala Gly Glu Leu Ser Pro Thr Cys Ile Phe
 20 25 30

Pro Ser Phe Thr Cys Asp Ser Leu Asp Gly Tyr His Ser Phe Glu Cys
 35 40 45

Gly Ser Ile Asp Pro Leu Thr Gly Ser His Tyr Thr Cys Arg Arg Ser
 50 55 60

Pro Arg Leu Leu Thr Asn Gly Tyr Tyr Ile Trp Thr Glu Asp Ser Phe
 65 70 75 80

Leu Cys Asp Lys Asp Gly Asn Ile Thr Leu Asn Pro Ser Gln Thr Ser
 85 90 95

Val Met Tyr Lys Glu Asn Leu Val Ser Thr Ser Lys Ser Trp Leu His
 100 105 110

Gly Ser Ile Phe Gly Asp Ile Asn Ser Ser Pro Ser Glu Asp Asn Trp
 115 120 125

Leu Lys Gly Thr Arg Arg Leu Asp Thr Asp His Cys Asn Gly Asn Ala
 130 135 140

Asp Asp Leu Asp Cys Ser Ser Leu Thr Asp Asp Trp Glu Ser Gly Lys
 145 150 155 160

Met Asn Ala Glu Ser Val Ile Thr Ser Ser Ser Ser His Ile Ile Ser
 165 170 175

Gln Pro Pro Gly Gly Asn Ser His Ser Leu Ser Leu Gln Ser Gln Leu
 180 185 190

Thr Ala Ser Glu Arg Phe Gln Glu Asn Ser Ser Asp His Ser Glu Thr
 195 200 205

Arg Leu Leu Gln Glu Val Phe Phe Gln Ala Ile Leu Leu Ala Val Cys
 210 215 220

Leu Ile Thr Ser Ala Cys Ala Arg Trp Phe Met Gly Glu Ile Leu Ala
 225 230 235 240

Ser Val Phe Thr Cys Ser Leu Met Ile Thr Val Ala Tyr Val Lys Ser
 245 250 255

Leu Phe Leu Ser Leu Ala Ser Tyr Phe Lys Thr Thr Ala Cys Ala Arg
 260 265 270

Phe Val Lys Ile
 275

<210> 2965
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 2965

Met Val Leu Gln Thr Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser
 1 5 10 15

Gly Ala Tyr Gly Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala
 20 25 30

Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser
 35 40 45

Val Leu Tyr Ser Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln
 50 55 60

Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg

65

70

75

80

Glu Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
 85 90 95

Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr
 100 105 110

Tyr Cys Gln Gln Tyr Asp Thr Ile Pro Thr Phe Gly Gly Gly Thr Lys
 115 120 125

Val Glu Ile Lys Arg
 130

<210> 2966

<211> 369

<212> PRT

<213> Homo sapiens

<400> 2966

Met Leu Lys Pro Ser Leu Pro Phe Thr Ser Leu Leu Phe Leu Gln Leu
 1 5 10 15

Pro Leu Leu Gly Val Gly Leu Asn Thr Thr Ile Leu Thr Pro Asn Gly
 20 25 30

Asn Glu Asp Thr Thr Ala Asp Phe Phe Leu Thr Thr Met Pro Thr Asp
 35 40 45

Ser Leu Ser Val Ser Thr Leu Pro Leu Pro Glu Val Gln Cys Phe Val
 50 55 60

Phe Asn Val Glu Tyr Met Asn Cys Thr Trp Asn Ser Ser Ser Glu Pro
 65 70 75 80

Gln Pro Thr Asn Leu Thr Leu His Tyr Trp Tyr Lys Asn Ser Asp Asn
 85 90 95

Asp Lys Val Gln Lys Cys Ser His Tyr Leu Phe Ser Glu Glu Ile Thr
 100 105 110

Ser Gly Cys Gln Leu Gln Lys Lys Glu Ile His Leu Tyr Gln Thr Phe
 115 120 125

Val Val Gln Leu Gln Asp Pro Arg Glu Pro Arg Arg Gln Ala Thr Gln
 130 135 140

Met Leu Lys Leu Gln Asn Leu Val Ile Pro Trp Ala Pro Glu Asn Leu
 145 150 155 160

Thr Leu His Lys Leu Ser Glu Ser Gln Leu Glu Leu Asn Trp Asn Asn
 165 170 175

Arg Phe Leu Asn His Cys Leu Glu His Leu Val Gln Tyr Arg Thr Asp
 180 185 190

Trp Asp His Ser Trp Thr Glu Gln Ser Val Asp Tyr Arg His Lys Phe
 195 200 205

Ser Leu Pro Ser Val Asp Gly Gln Lys Arg Tyr Thr Phe Arg Val Arg
 210 215 220

Ser Arg Phe Asn Pro Leu Cys Gly Ser Ala Gln His Trp Ser Glu Trp
 225 230 235 240

Ser His Pro Ile His Trp Gly Ser Asn Thr Ser Lys Glu Asn Pro Phe
 245 250 255

Leu Phe Ala Leu Glu Ala Val Val Ile Ser Val Gly Ser Met Gly Leu
 260 265 270

Ile Ile Ser Leu Leu Cys Val Tyr Phe Trp Leu Glu Arg Thr Met Pro
 275 280 285

Arg Ile Pro Thr Leu Lys Asn Leu Glu Asp Leu Val Thr Glu Tyr His
 290 295 300

Gly Asn Phe Ser Ala Trp Ser Gly Val Ser Lys Gly Leu Ala Glu Ser
 305 310 315 320

Leu Gln Pro Asp Tyr Ser Glu Arg Leu Cys Leu Val Ser Glu Ile Pro
 325 330 335

Pro Lys Gly Gly Ala Leu Gly Glu Gly Pro Gly Ala Ser Pro Cys Asn
 340 345 350

Gln His Ser Pro Tyr Trp Ala Pro Pro Cys Tyr Thr Leu Lys Pro Glu
 355 360 365

Thr

<210> 2967
 <211> 323
 <212> PRT
 <213> Homo sapiens

<400> 2967

Met Ala Phe Ser Gly Ser Gln Ala Pro Tyr Leu Ser Pro Ala Val Pro
 1 5 10 15

Phe Ser Gly Thr Ile Gln Gly Gly Leu Gln Asp Gly Leu Gln Ile Thr
 20 25 30

Val Asn Gly Thr Val Leu Ser Ser Ser Gly Thr Arg Phe Ala Val Asn
 35 40 45

Phe Gln Thr Gly Phe Ser Gly Asn Asp Ile Ala Phe His Phe Asn Pro
 50 55 60

Arg Phe Glu Asp Gly Gly Tyr Val Val Cys Asn Thr Arg Gln Asn Gly
 65 70 75 80

Ser Trp Gly Pro Glu Glu Arg Arg Thr His Met Pro Phe Gln Lys Gly
 85 90 95

Met Pro Phe Asp Leu Cys Phe Leu Val Gln Ser Ser Asp Phe Lys Val
 100 105 110

Met Val Asn Gly Ile Leu Phe Val Gln Tyr Phe His Arg Val Pro Phe
 115 120 125

His Arg Val Asp Thr Ile Phe Val Asn Gly Ser Val Gln Leu Ser Tyr
 130 135 140

Ile Ser Phe Gln Pro Pro Gly Val Trp Pro Ala Asn Pro Ala Pro Ile
 145 150 155 160

Thr Gln Thr Val Ile His Thr Val Gln Ser Ala Pro Gly Gln Met Phe
 165 170 175

Ser Thr Pro Ala Ile Pro Pro Met Met Tyr Pro His Pro Ala Tyr Pro
 180 185 190

Met Pro Phe Ile Thr Thr Ile Leu Gly Gly Leu Tyr Pro Ser Lys Ser
 195 200 205

Ile Leu Leu Ser Gly Thr Val Leu Pro Ser Ala Gln Arg Phe His Ile
 210 215 220

Asn Leu Cys Ser Gly Asn His Ile Ala Phe His Leu Asn Leu Arg Phe
 225 230 235 240

Asp Glu Asn Ala Val Val Arg Asn Thr Gln Ile Asp Asn Ser Trp Gly
 245 250 255

Ser Glu Glu Arg Ser Leu Pro Arg Lys Met Pro Phe Val Arg Gly Gln
 260 265 270

Ser Phe Ser Val Trp Ile Leu Cys Gly Ala His Cys Leu Lys Val Ala
 275 280 285

Val Asp Gly Gln His Leu Phe Glu Tyr Tyr His Arg Leu Arg Asn Leu
 290 295 300

Pro Thr Ile Asn Arg Leu Glu Val Gly Gly Asp Ile Gln Leu Thr His
 305 310 315 320

Val Gln Thr

<210> 2968
 <211> 1866
 <212> PRT
 <213> Homo sapiens

<400> 2968

Met Asp Pro Val Gly Leu Gln Leu Gly Asn Lys Asn Leu Trp Ser Cys
 1 5 10 15

Leu Val Arg Leu Leu Thr Lys Asp Pro Glu Trp Leu Asn Ala Lys Met
 20 25 30

Lys Phe Phe Leu Pro Asn Thr Asp Leu Asp Ser Arg Asn Glu Thr Leu
 35 40 45

Asp Pro Glu Gln Arg Val Ile Leu Gln Leu Asn Lys Leu His Val Gln
 50 55 60

Gly Ser Asp Thr Trp Gln Ser Phe Ile His Cys Val Cys Met Gln Leu
 65 70 75 80

Glu Val Pro Leu Asp Leu Glu Val Leu Leu Leu Ser Thr Phe Gly Tyr
 85 90 95

Asp Asp Gly Phe Thr Ser Gln Leu Gly Ala Glu Gly Lys Ser Gln Pro
 100 105 110

Glu Ser Gln Leu His His Gly Leu Lys Arg Pro His Gln Ser Cys Gly
 115 120 125

Ser Ser Pro Arg Arg Lys Gln Cys Lys Lys Gln Gln Leu Glu Leu Ala
 130 135 140

Lys Lys Tyr Leu Gln Leu Leu Arg Thr Ser Ala Gln Gln Arg Tyr Arg
 145 150 155 160

Ser Gln Ile Pro Gly Ser Gly Gln Pro His Ala Phe His Gln Val Tyr
 165 170 175

Val Pro Pro Ile Leu Arg Arg Ala Thr Ala Ser Leu Asp Thr Pro Glu
 180 185 190

Gly Ala Ile Met Gly Asp Val Lys Val Glu Asp Gly Ala Asp Val Ser
 195 200 205

Ile Ser Asp Leu Phe Asn Thr Arg Val Asn Lys Gly Pro Arg Val Thr
 210 215 220

Val Leu Leu Gly Lys Ala Gly Met Gly Lys Thr Thr Leu Ala His Arg
 225 230 235 240

Leu Cys Gln Lys Trp Ala Glu Gly His Leu Asn Cys Phe Gln Ala Leu
 245 250 255

Phe Leu Phe Glu Phe Arg Gln Leu Asn Leu Ile Thr Arg Phe Leu Thr
 260 265 270

Pro Ser Glu Leu Leu Phe Asp Leu Tyr Leu Ser Pro Glu Ser Asp His
 275 280 285

Asp Thr Val Phe Gln Tyr Leu Glu Lys Asn Ala Asp Gln Val Leu Leu
 290 295 300

Ile Phe Asp Gly Leu Asp Glu Ala Leu Gln Pro Met Gly Pro Asp Gly
 305 310 315 320

Pro Gly Pro Val Leu Thr Leu Phe Ser His Leu Cys Asn Gly Thr Leu
 325 330 335

Leu Pro Gly Cys Arg Val Met Ala Thr Ser Arg Pro Gly Lys Leu Pro

[illegible]

Ala Ala Val Val Gln Val Leu Lys Lys Leu Ala Thr Arg Lys Leu Thr
595 600 605

Gly Pro Lys Val Val Glu Leu Cys His Cys Val Asp Glu Thr Gln Glu
610 615 620

Pro Glu Leu Ala Ser Leu Thr Ala Gln Ser Leu Pro Tyr Gln Leu Pro
625 630 635 640

Phe His Asn Phe Pro Leu Thr Cys Thr Asp Leu Ala Thr Leu Thr Asn
645 650 655

Ile Leu Glu His Arg Glu Ala Pro Ile His Leu Asp Phe Asp Gly Cys
660 665 670

Pro Leu Glu Pro His Cys Pro Glu Ala Leu Val Gly Cys Gly Gln Ile
675 680 685

Glu Asn Leu Ser Phe Lys Ser Arg Lys Cys Gly Asp Ala Phe Ala Glu
690 695 700

Ala Leu Ser Arg Ser Leu Pro Thr Met Gly Arg Leu Gln Met Leu Gly
705 710 715 720

Leu Ala Gly Ser Lys Ile Thr Ala Arg Gly Ile Ser His Leu Val Lys
725 730 735

Ala Leu Pro Leu Cys Pro Gln Leu Lys Glu Val Ser Phe Arg Asp Asn
740 745 750

Gln Leu Ser Asp Gln Val Val Leu Asn Ile Val Glu Val Leu Pro His
755 760 765

Leu Pro Arg Leu Arg Lys Leu Asp Leu Ser Ser Asn Ser Ile Cys Val
770 775 780

Ser Thr Leu Leu Cys Leu Ala Arg Val Ala Val Thr Cys Pro Thr Val
785 790 795 800

Arg Met Leu Gln Ala Arg Glu Arg Thr Ile Ile Phe Leu Leu Ser Pro
805 810 815

Pro Thr Glu Thr Thr Ala Glu Leu Gln Arg Ala Pro Asp Leu Gln Glu
820 825 830

Ser Asp Gly Gln Arg Lys Gly Ala Gln Ser Arg Ser Leu Thr Leu Arg
 835 840 845

Leu Gln Lys Cys Gln Leu Gln Val His Asp Ala Glu Ala Leu Ile Ala
 850 855 860

Leu Leu Gln Glu Gly Pro His Leu Glu Glu Val Asp Leu Ser Gly Asn
 865 870 875 880

Gln Leu Glu Asp Glu Gly Cys Arg Leu Met Ala Glu Ala Ala Ser Gln
 885 890 895

Leu His Ile Ala Arg Lys Leu Asp Leu Ser Asp Asn Gly Leu Ser Val
 900 905 910

Ala Gly Val His Cys Val Leu Arg Ala Val Ser Ala Cys Trp Thr Leu
 915 920 925

Ala Glu Leu His Ile Ser Leu Gln His Lys Thr Val Ile Phe Met Phe
 930 935 940

Ala Gln Glu Pro Glu Glu Gln Lys Gly Pro Gln Glu Arg Ala Ala Phe
 945 950 955 960

Leu Asp Ser Leu Met Leu Gln Met Pro Ser Glu Leu Pro Leu Ser Ser
 965 970 975

Arg Arg Met Arg Leu Thr His Cys Gly Leu Gln Glu Lys His Leu Glu
 980 985 990

Gln Leu Cys Lys Ala Leu Gly Gly Ser Cys His Leu Gly His Leu His
 995 1000 1005

Leu Asp Phe Ser Gly Asn Ala Leu Gly Asp Glu Gly Ala Ala Arg
 1010 1015 1020

Leu Ala Gln Leu Leu Pro Gly Leu Gly Ala Leu Gln Ser Leu Asn
 1025 1030 1035

Leu Ser Glu Asn Gly Leu Ser Leu Asp Ala Val Leu Gly Leu Val
 1040 1045 1050

Arg Cys Phe Ser Thr Leu Gln Trp Leu Phe Arg Leu Asp Ile Ser
 1055 1060 1065

Phe	Glu	Ser	Gln	His	Ile	Leu	Leu	Arg	Gly	Asp	Lys	Thr	Ser	Arg
1070						1075					1080			
Asp	Met	Trp	Ala	Thr	Gly	Ser	Leu	Pro	Asp	Phe	Pro	Ala	Ala	Ala
1085						1090					1095			
Lys	Phe	Leu	Gly	Phe	Arg	Gln	Arg	Cys	Ile	Pro	Arg	Ser	Leu	Cys
1100						1105					1110			
Leu	Ser	Glu	Cys	Pro	Leu	Glu	Pro	Pro	Ser	Leu	Thr	Arg	Leu	Cys
1115						1120					1125			
Ala	Thr	Leu	Lys	Asp	Cys	Pro	Gly	Pro	Leu	Glu	Leu	Gln	Leu	Ser
1130						1135					1140			
Cys	Glu	Phe	Leu	Ser	Asp	Gln	Ser	Leu	Glu	Thr	Leu	Leu	Asp	Cys
1145						1150					1155			
Leu	Pro	Gln	Leu	Pro	Gln	Leu	Ser	Leu	Leu	Gln	Leu	Ser	Gln	Thr
1160						1165					1170			
Gly	Leu	Ser	Pro	Lys	Ser	Pro	Phe	Leu	Leu	Ala	Asn	Thr	Leu	Ser
1175						1180					1185			
Leu	Cys	Pro	Arg	Val	Lys	Lys	Val	Asp	Leu	Arg	Ser	Leu	His	His
1190						1195					1200			
Ala	Thr	Leu	His	Phe	Arg	Ser	Asn	Glu	Glu	Glu	Glu	Gly	Val	Cys
1205						1210					1215			
Cys	Gly	Arg	Phe	Thr	Gly	Cys	Ser	Leu	Ser	Gln	Glu	His	Val	Glu
1220						1225					1230			
Ser	Leu	Cys	Trp	Leu	Leu	Ser	Lys	Cys	Lys	Asp	Leu	Ser	Gln	Val
1235						1240					1245			
Asp	Leu	Ser	Ala	Asn	Leu	Leu	Gly	Asp	Ser	Gly	Leu	Arg	Cys	Leu
1250						1255					1260			
Leu	Glu	Cys	Leu	Pro	Gln	Val	Pro	Ile	Ser	Gly	Leu	Leu	Asp	Leu
1265						1270					1275			
Ser	His	Asn	Ser	Ile	Ser	Gln	Glu	Ser	Ala	Leu	Tyr	Leu	Leu	Glu
1280						1285					1290			
Thr	Leu	Pro	Ser	Cys	Pro	Arg	Val	Arg	Glu	Ala	Ser	Val	Asn	Leu

1295	1300	1305
Gly Ser Glu Gln Ser Phe Arg Ile His Phe Ser Arg Glu Asp Gln 1310 1315 1320		
Ala Gly Lys Thr Leu Arg Leu Ser Glu Cys Ser Phe Arg Pro Glu 1325 1330 1335		
His Val Ser Arg Leu Ala Thr Gly Leu Ser Lys Ser Leu Gln Leu 1340 1345 1350		
Thr Glu Leu Thr Leu Thr Gln Cys Cys Leu Gly Gln Lys Gln Leu 1355 1360 1365		
Ala Ile Leu Leu Ser Leu Val Gly Arg Pro Ala Gly Leu Phe Ser 1370 1375 1380		
Leu Arg Val Gln Glu Pro Trp Ala Asp Arg Ala Arg Val Leu Ser 1385 1390 1395		
Leu Leu Glu Val Cys Ala Gln Ala Ser Gly Ser Val Thr Glu Ile 1400 1405 1410		
Ser Ile Ser Glu Thr Gln Gln Gln Leu Cys Val Gln Leu Glu Phe 1415 1420 1425		
Pro Arg Gln Glu Glu Asn Pro Glu Ala Val Ala Leu Arg Leu Ala 1430 1435 1440		
His Cys Asp Leu Gly Ala His His Ser Leu Leu Val Gly Gln Leu 1445 1450 1455		
Met Glu Thr Cys Ala Arg Leu Gln Gln Leu Ser Leu Ser Gln Val 1460 1465 1470		
Asn Leu Cys Glu Asp Asp Asp Ala Ser Ser Leu Leu Leu Gln Ser 1475 1480 1485		
Leu Leu Leu Ser Leu Ser Glu Leu Lys Thr Phe Arg Leu Thr Ser 1490 1495 1500		
Ser Cys Val Ser Thr Glu Gly Leu Ala His Leu Ala Ser Gly Leu 1505 1510 1515		
Gly His Cys His His Leu Glu Glu Leu Asp Leu Ser Asn Asn Gln 1520 1525 1530		

Phe	Asp	Glu	Glu	Gly	Thr	Lys	Ala	Leu	Met	Arg	Ala	Leu	Glu	Gly
1535						1540					1545			
Lys	Trp	Met	Leu	Lys	Arg	Leu	Asp	Leu	Ser	His	Leu	Leu	Leu	Asn
1550						1555					1560			
Ser	Ser	Thr	Leu	Ala	Leu	Leu	Thr	His	Arg	Leu	Ser	Gln	Met	Thr
1565						1570					1575			
Cys	Leu	Gln	Ser	Leu	Arg	Leu	Asn	Arg	Asn	Ser	Ile	Gly	Asp	Val
1580						1585					1590			
Gly	Cys	Cys	His	Leu	Ser	Glu	Ala	Leu	Arg	Ala	Ala	Thr	Ser	Leu
1595						1600					1605			
Glu	Glu	Leu	Asp	Leu	Ser	His	Asn	Gln	Ile	Gly	Asp	Ala	Gly	Val
1610						1615					1620			
Gln	His	Leu	Ala	Thr	Ile	Leu	Pro	Gly	Leu	Pro	Glu	Leu	Arg	Lys
1625						1630					1635			
Ile	Asp	Leu	Ser	Gly	Asn	Ser	Ile	Ser	Ser	Ala	Gly	Gly	Val	Gln
1640						1645					1650			
Leu	Ala	Glu	Ser	Leu	Val	Leu	Cys	Arg	Arg	Leu	Glu	Glu	Leu	Met
1655						1660					1665			
Leu	Gly	Cys	Asn	Ala	Leu	Gly	Asp	Pro	Thr	Ala	Leu	Gly	Leu	Ala
1670						1675					1680			
Gln	Glu	Leu	Pro	Gln	His	Leu	Arg	Val	Leu	His	Leu	Pro	Phe	Ser
1685						1690					1695			
His	Leu	Gly	Pro	Gly	Gly	Ala	Leu	Ser	Leu	Ala	Gln	Ala	Leu	Asp
1700						1705					1710			
Gly	Ser	Pro	His	Leu	Glu	Glu	Ile	Ser	Leu	Ala	Glu	Asn	Asn	Leu
1715						1720					1725			
Ala	Gly	Gly	Val	Leu	Arg	Phe	Cys	Met	Glu	Leu	Pro	Leu	Leu	Arg
1730						1735					1740			
Gln	Ile	Asp	Leu	Val	Ser	Cys	Lys	Ile	Asp	Asn	Gln	Thr	Ala	Lys
1745						1750					1755			

Leu Leu Thr Ser Ser Phe Thr Ser Cys Pro Ala Leu Glu Val Ile
 1760 1765 1770

Leu Leu Ser Trp Asn Leu Leu Gly Asp Glu Ala Ala Ala Glu Leu
 1775 1780 1785

Ala Gln Val Leu Pro Lys Met Gly Arg Leu Lys Arg Val Asp Leu
 1790 1795 1800

Glu Lys Asn Gln Ile Thr Ala Leu Gly Ala Trp Leu Leu Ala Glu
 1805 1810 1815

Gly Leu Ala Gln Gly Ser Ser Ile Gln Val Ile Arg Leu Trp Asn
 1820 1825 1830

Asn Pro Ile Pro Cys Asp Met Ala Gln His Leu Lys Ser Gln Glu
 1835 1840 1845

Pro Arg Leu Asp Phe Ala Phe Phe Asp Asn Gln Pro Gln Ala Pro
 1850 1855 1860

Trp Gly Thr
 1865

<210> 2969
 <211> 547
 <212> PRT
 <213> Homo sapiens

<400> 2969

Met Ala Thr Met Val Pro Ser Val Leu Trp Pro Arg Ala Cys Trp Thr
 1 5 10 15

Leu Leu Val Cys Cys Leu Leu Thr Pro Gly Val Gln Gly Gln Glu Phe
 20 25 30

Leu Leu Arg Val Glu Pro Gln Asn Pro Val Leu Ser Ala Gly Gly Ser
 35 40 45

Leu Phe Val Asn Cys Ser Thr Asp Cys Pro Ser Ser Glu Lys Ile Ala
 50 55 60

Leu Glu Thr Ser Leu Ser Lys Glu Leu Val Ala Ser Gly Met Gly Trp
 65 70 75 80

Ala Ala Phe Asn Leu Ser Asn Val Thr Gly Asn Ser Arg Ile Leu Cys

85

90

95

Ser Val Tyr Cys Asn Gly Ser Gln Ile Thr Gly Ser Ser Asn Ile Thr
 100 105 110

Val Tyr Gly Leu Pro Glu Arg Val Glu Leu Ala Pro Leu Pro Pro Trp
 115 120 125

Gln Pro Val Gly Gln Asn Phe Thr Leu Arg Cys Gln Val Glu Gly Gly
 130 135 140

Ser Pro Arg Thr Ser Leu Thr Val Val Leu Leu Arg Trp Glu Glu Glu
 145 150 155 160

Leu Ser Arg Gln Pro Ala Val Glu Glu Pro Ala Glu Val Thr Ala Thr
 165 170 175

Val Leu Ala Ser Arg Asp Asp His Gly Ala Pro Phe Ser Cys Arg Thr
 180 185 190

Glu Leu Asp Met Gln Pro Gln Gly Leu Gly Leu Phe Val Asn Thr Ser
 195 200 205

Ala Pro Arg Gln Leu Arg Thr Phe Val Leu Pro Val Thr Pro Pro Arg
 210 215 220

Leu Val Ala Pro Arg Phe Leu Glu Val Glu Thr Ser Trp Pro Val Asp
 225 230 235 240

Cys Thr Leu Asp Gly Leu Phe Pro Ala Ser Glu Ala Gln Val Tyr Leu
 245 250 255

Ala Leu Gly Asp Gln Met Leu Asn Ala Thr Val Met Asn His Gly Asp
 260 265 270

Thr Leu Thr Ala Thr Ala Thr Ala Thr Ala Arg Ala Asp Gln Glu Gly
 275 280 285

Ala Arg Glu Ile Val Cys Asn Val Thr Leu Gly Gly Glu Arg Arg Glu
 290 295 300

Ala Arg Glu Asn Leu Thr Val Phe Ser Phe Leu Gly Pro Ile Val Asn
 305 310 315 320

Leu Ser Glu Pro Thr Ala His Glu Gly Ser Thr Val Thr Val Ser Cys
 325 330 335

Met Ala Gly Ala Arg Val Gln Val Thr Leu Asp Gly Val Pro Ala Ala
 340 345 350

Ala Pro Gly Gln Pro Ala Gln Leu Gln Leu Asn Ala Thr Glu Ser Asp
 355 360 365

Asp Gly Arg Ser Phe Phe Cys Ser Ala Thr Leu Glu Val Asp Gly Glu
 370 375 380

Phe Leu His Arg Asn Ser Ser Val Gln Leu Arg Val Leu Tyr Gly Pro
 385 390 395 400

Lys Ile Asp Arg Ala Thr Cys Pro Gln His Leu Lys Trp Lys Asp Lys
 405 410 415

Thr Arg His Val Leu Gln Cys Gln Ala Arg Gly Asn Pro Tyr Pro Glu
 420 425 430

Leu Arg Cys Leu Lys Glu Gly Ser Ser Arg Glu Val Pro Val Gly Ile
 435 440 445

Pro Phe Phe Val Asn Val Thr His Asn Gly Thr Tyr Gln Cys Gln Ala
 450 455 460

Ser Ser Ser Arg Gly Lys Tyr Thr Leu Val Val Val Met Asp Ile Glu
 465 470 475 480

Ala Gly Ser Ser His Phe Val Pro Val Phe Val Ala Val Leu Leu Thr
 485 490 495

Leu Gly Val Val Thr Ile Val Leu Ala Leu Met Tyr Val Phe Arg Glu
 500 505 510

His Gln Arg Ser Gly Ser Tyr His Val Arg Glu Glu Ser Thr Tyr Leu
 515 520 525

Pro Leu Thr Ser Met Gln Pro Thr Glu Ala Met Gly Glu Glu Pro Ser
 530 535 540

Arg Ala Glu
 545

<210> 2970
 <211> 260
 <212> PRT

<213> Homo sapiens

<400> 2970

Met Arg Pro Glu Asp Arg Met Phe His Ile Arg Ala Val Ile Leu Arg
 1 5 10 15

Ala Leu Ser Leu Ala Phe Leu Leu Ser Leu Arg Gly Ala Gly Ala Ile
 20 25 30

Lys Ala Asp His Val Ser Thr Tyr Ala Ala Phe Val Gln Thr His Arg
 35 40 45

Pro Thr Gly Glu Phe Met Phe Glu Phe Asp Glu Asp Glu Met Phe Tyr
 50 55 60

Val Asp Leu Asp Lys Lys Glu Thr Val Trp His Leu Glu Glu Phe Gly
 65 70 75 80

Gln Ala Phe Ser Phe Glu Ala Gln Gly Gly Leu Ala Asn Ile Ala Ile
 85 90 95

Leu Asn Asn Asn Leu Asn Thr Leu Ile Gln Arg Ser Asn His Thr Gln
 100 105 110

Ala Thr Asn Asp Pro Pro Glu Val Thr Val Phe Pro Lys Glu Pro Val
 115 120 125

Glu Leu Gly Gln Pro Asn Thr Leu Ile Cys His Ile Asp Lys Phe Phe
 130 135 140

Pro Pro Val Leu Asn Val Thr Trp Leu Cys Asn Gly Glu Leu Val Thr
 145 150 155 160

Glu Gly Val Ala Glu Ser Leu Phe Leu Pro Arg Thr Asp Tyr Ser Phe
 165 170 175

His Lys Phe His Tyr Leu Thr Phe Val Pro Ser Ala Glu Asp Phe Tyr
 180 185 190

Asp Cys Arg Val Glu His Trp Gly Leu Asp Gln Pro Leu Leu Lys His
 195 200 205

Trp Glu Ala Gln Glu Pro Ile Gln Met Pro Glu Thr Thr Glu Thr Val
 210 215 220

Leu Cys Ala Leu Gly Leu Val Leu Gly Leu Val Gly Ile Ile Val Gly

225 230 235 240
 Thr Val Leu Ile Ile Lys Ser Leu Arg Ser Gly His Asp Pro Arg Ala
 245 250 255

 Gln Gly Thr Leu
 260

 <210> 2971
 <211> 495
 <212> PRT
 <213> Homo sapiens

 <400> 2971
 Met Pro Met Gly Ser Leu Gln Pro Leu Ala Thr Leu Tyr Leu Leu Gly
 1 5 10 15

 Met Leu Val Ala Ser Cys Leu Gly Arg Leu Ser Trp Tyr Asp Pro Asp
 20 25 30

 Phe Gln Ala Arg Leu Thr Arg Ser Asn Ser Lys Cys Gln Gly Gln Leu
 35 40 45

 Glu Val Tyr Leu Lys Asp Gly Trp His Met Val Cys Ser Gln Ser Trp
 50 55 60

 Gly Arg Ser Ser Lys Gln Trp Glu Asp Pro Ser Gln Ala Ser Lys Val
 65 70 75 80

 Cys Gln Arg Leu Asn Cys Gly Val Pro Leu Ser Leu Gly Pro Phe Leu
 85 90 95

 Val Thr Tyr Thr Pro Gln Ser Ser Ile Ile Cys Tyr Gly Gln Leu Gly
 100 105 110

 Ser Phe Ser Asn Cys Ser His Ser Arg Asn Asp Met Cys His Ser Leu
 115 120 125

 Gly Leu Thr Cys Leu Glu Pro Gln Lys Thr Thr Pro Pro Thr Thr Arg
 130 135 140

 Pro Pro Pro Thr Thr Thr Pro Glu Pro Thr Ala Pro Pro Arg Leu Gln
 145 150 155 160

 Leu Val Ala Gln Ser Gly Gly Gln His Cys Ala Gly Val Val Glu Phe
 165 170 175

Tyr Ser Gly Ser Leu Gly Gly Thr Ile Ser Tyr Glu Ala Gln Asp Lys
 180 185 190

Thr Gln Asp Leu Glu Asn Phe Leu Cys Asn Asn Leu Gln Cys Gly Ser
 195 200 205

Phe Leu Lys His Leu Pro Glu Thr Glu Ala Gly Arg Ala Gln Asp Pro
 210 215 220

Gly Glu Pro Arg Glu His Gln Pro Leu Pro Ile Gln Trp Lys Ile Gln
 225 230 235 240

Asn Ser Ser Cys Thr Ser Leu Glu His Cys Phe Arg Lys Ile Lys Pro
 245 250 255

Gln Lys Ser Gly Arg Val Leu Ala Leu Leu Cys Ser Gly Phe Gln Pro
 260 265 270

Lys Val Gln Ser Arg Leu Val Gly Gly Ser Ser Ile Cys Glu Gly Thr
 275 280 285

Val Glu Val Arg Gln Gly Ala Gln Trp Ala Ala Leu Cys Asp Ser Ser
 290 295 300

Ser Ala Arg Ser Ser Leu Arg Trp Glu Glu Val Cys Arg Glu Gln Gln
 305 310 315 320

Cys Gly Ser Val Asn Ser Tyr Arg Val Leu Asp Ala Gly Asp Pro Thr
 325 330 335

Ser Arg Gly Leu Phe Cys Pro His Gln Lys Leu Ser Gln Cys His Glu
 340 345 350

Leu Trp Glu Arg Asn Ser Tyr Cys Lys Lys Val Phe Val Thr Cys Gln
 355 360 365

Asp Pro Asn Pro Ala Gly Leu Ala Ala Gly Thr Val Ala Ser Ile Ile
 370 375 380

Leu Ala Leu Val Leu Leu Val Val Leu Leu Val Val Cys Gly Pro Leu
 385 390 395 400

Ala Tyr Lys Lys Leu Val Lys Lys Phe Arg Gln Lys Lys Gln Arg Gln
 405 410 415

Trp Ile Gly Pro Thr Gly Met Asn Gln Asn Met Ser Phe His Arg Asn
 420 425 430

His Thr Ala Thr Val Arg Ser His Ala Glu Asn Pro Thr Ala Ser His
 435 440 445

Val Asp Asn Glu Tyr Ser Gln Pro Pro Arg Asn Ser Arg Leu Ser Ala
 450 455 460

Tyr Pro Ala Leu Glu Gly Val Leu His Arg Ser Ser Met Gln Pro Asp
 465 470 475 480

Asn Ser Ser Asp Ser Asp Tyr Asp Leu His Gly Ala Gln Arg Leu
 485 490 495

<210> 2972
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 2972

Lys Val Phe Glu Arg Cys Glu Leu Ala Arg Thr Leu Lys Arg Leu Gly
 1 5 10 15

Met Asp Gly Tyr Arg Gly Ile Ser Leu Ala Asn Trp Met Cys Leu Ala
 20 25 30

Lys Trp Glu Ser Gly Tyr Asn Thr Arg Ala Thr Asn Tyr Asn Ala Gly
 35 40 45

Asp Arg Ser Thr Asp Tyr Gly Ile Phe Gln Ile Asn Ser Arg Tyr Trp
 50 55 60

Cys Asn Asp Gly Lys Thr Pro Gly Ala Val Asn Ala Cys His Leu Ser
 65 70 75 80

Cys Ser Ala Leu Leu Gln Asp Asn Ile Ala Asp Ala Val Ala Cys Ala
 85 90 95

Lys Arg Val Val Arg Asp Pro Gln Gly Ile Arg Ala Trp Val Ala Trp
 100 105 110

Arg Asn Arg Cys Gln Asn Arg Asp Val Arg Gln Tyr Val Gln Gly Cys
 115 120 125

Gly Val
 130

<210> 2973
 <211> 491
 <212> PRT
 <213> Homo sapiens

<400> 2973

Met Asn Pro Ala Ala Glu Ala Glu Phe Asn Ile Leu Leu Ala Thr Asp
 1 5 10 15

Ser Tyr Lys Val Thr His Tyr Lys Gln Tyr Pro Pro Asn Thr Ser Lys
 20 25 30

Val Tyr Ser Tyr Phe Glu Cys Arg Glu Lys Lys Thr Glu Asn Ser Lys
 35 40 45

Leu Arg Lys Val Lys Tyr Glu Glu Thr Val Phe Tyr Gly Leu Gln Tyr
 50 55 60

Ile Leu Asn Lys Tyr Leu Lys Gly Lys Val Val Thr Lys Glu Lys Ile
 65 70 75 80

Gln Glu Ala Lys Asp Val Tyr Lys Glu His Phe Gln Asp Asp Val Phe
 85 90 95

Asn Glu Lys Gly Trp Asn Tyr Ile Leu Glu Lys Tyr Asp Gly His Leu
 100 105 110

Pro Ile Glu Ile Lys Ala Val Pro Glu Gly Phe Val Ile Pro Arg Gly
 115 120 125

Asn Val Leu Phe Thr Val Glu Asn Thr Asp Pro Glu Cys Tyr Trp Leu
 130 135 140

Thr Asn Trp Ile Glu Thr Ile Leu Val Gln Ser Trp Tyr Pro Ile Thr
 145 150 155 160

Val Ala Thr Asn Ser Arg Glu Gln Lys Lys Ile Leu Ala Lys Tyr Leu
 165 170 175

Leu Glu Thr Ser Gly Asn Leu Asp Gly Leu Glu Tyr Lys Leu His Asp
 180 185 190

Phe Gly Tyr Arg Gly Val Ser Ser Gln Glu Thr Ala Gly Ile Gly Ala
 195 200 205

Ser Ala His Leu Val Asn Phe Lys Gly Thr Asp Thr Val Ala Gly Leu
 210 215 220

Ala Leu Ile Lys Lys Tyr Tyr Gly Thr Lys Asp Pro Val Pro Gly Tyr
 225 230 235 240

Ser Val Pro Ala Ala Glu His Ser Thr Ile Thr Ala Trp Gly Lys Asp
 245 250 255

His Glu Lys Asp Ala Phe Glu His Ile Val Thr Gln Phe Ser Ser Val
 260 265 270

Pro Val Ser Val Val Ser Asp Ser Tyr Asp Ile Tyr Asn Ala Cys Glu
 275 280 285

Lys Ile Trp Gly Glu Asp Leu Arg His Leu Ile Val Ser Arg Ser Thr
 290 295 300

Gln Ala Pro Leu Ile Ile Arg Pro Asp Ser Gly Asn Pro Leu Asp Thr
 305 310 315 320

Val Leu Lys Val Leu Glu Ile Leu Gly Lys Lys Phe Pro Val Thr Glu
 325 330 335

Asn Ser Lys Gly Tyr Lys Leu Leu Pro Pro Tyr Leu Arg Val Ile Gln
 340 345 350

Gly Asp Gly Val Asp Ile Asn Thr Leu Gln Glu Ile Val Glu Gly Met
 355 360 365

Lys Gln Lys Met Trp Ser Ile Glu Asn Ile Ala Phe Gly Ser Gly Gly
 370 375 380

Gly Leu Leu Gln Lys Leu Thr Arg Asp Leu Leu Asn Cys Ser Phe Lys
 385 390 395 400

Cys Ser Tyr Val Val Thr Asn Gly Leu Gly Ile Asn Val Phe Lys Asp
 405 410 415

Pro Val Ala Asp Pro Asn Lys Arg Ser Lys Lys Gly Arg Leu Ser Leu
 420 425 430

His Arg Thr Pro Ala Gly Asn Phe Val Thr Leu Glu Glu Gly Lys Gly
 435 440 445

Asp Leu Glu Glu Tyr Gly Gln Asp Leu Leu His Thr Val Phe Lys Asn

450

455

460

Gly Lys Val Thr Lys Ser Tyr Ser Phe Asp Glu Ile Arg Lys Asn Ala
 465 470 475 480

Gln Leu Asn Ile Glu Leu Glu Ala Ala His His
 485 490

<210> 2974
 <211> 862
 <212> PRT
 <213> Homo sapiens

<400> 2974

Met Glu Arg Ala Glu Ser Ser Ser Thr Glu Pro Ala Lys Ala Ile Lys
 1 5 10 15

Pro Ile Asp Arg Lys Ser Val His Gln Ile Cys Ser Gly Gln Val Val
 20 25 30

Leu Ser Leu Ser Thr Ala Val Lys Glu Leu Val Glu Asn Ser Leu Asp
 35 40 45

Ala Gly Ala Thr Asn Ile Asp Leu Lys Leu Lys Asp Tyr Gly Val Asp
 50 55 60

Leu Ile Glu Val Ser Asp Asn Gly Cys Gly Val Glu Glu Glu Asn Phe
 65 70 75 80

Glu Gly Leu Thr Leu Lys His His Thr Ser Lys Ile Gln Glu Phe Ala
 85 90 95

Asp Leu Thr Gln Val Glu Thr Phe Gly Phe Arg Gly Glu Ala Leu Ser
 100 105 110

Ser Leu Cys Ala Leu Ser Asp Val Thr Ile Ser Thr Cys His Ala Ser
 115 120 125

Ala Lys Val Gly Thr Arg Leu Met Phe Asp His Asn Gly Lys Ile Ile
 130 135 140

Gln Lys Thr Pro Tyr Pro Arg Pro Arg Gly Thr Thr Val Ser Val Gln
 145 150 155 160

Gln Leu Phe Ser Thr Leu Pro Val Arg His Lys Glu Phe Gln Arg Asn
 165 170 175

Ile Lys Lys Glu Tyr Ala Lys Met Val Gln Val Leu His Ala Tyr Cys
 180 185 190

Ile Ile Ser Ala Gly Ile Arg Val Ser Cys Thr Asn Gln Leu Gly Gln
 195 200 205

Gly Lys Arg Gln Pro Val Val Cys Thr Gly Gly Ser Pro Ser Ile Lys
 210 215 220

Glu Asn Ile Gly Ser Val Phe Gly Gln Lys Gln Leu Gln Ser Leu Ile
 225 230 235 240

Pro Phe Val Gln Leu Pro Pro Ser Asp Ser Val Cys Glu Glu Tyr Gly
 245 250 255

Leu Ser Cys Ser Asp Ala Leu His Asn Leu Phe Tyr Ile Ser Gly Phe
 260 265 270

Ile Ser Gln Cys Thr His Gly Val Gly Arg Ser Ser Thr Asp Arg Gln
 275 280 285

Phe Phe Phe Ile Asn Arg Arg Pro Cys Asp Pro Ala Lys Val Cys Arg
 290 295 300

Leu Val Asn Glu Val Tyr His Met Tyr Asn Arg His Gln Tyr Pro Phe
 305 310 315 320

Val Val Leu Asn Ile Ser Val Asp Ser Glu Cys Val Asp Ile Asn Val
 325 330 335

Thr Pro Asp Lys Arg Gln Ile Leu Leu Gln Glu Glu Lys Leu Leu Leu
 340 345 350

Ala Val Leu Lys Thr Ser Leu Ile Gly Met Phe Asp Ser Asp Val Asn
 355 360 365

Lys Leu Asn Val Ser Gln Gln Pro Leu Leu Asp Val Glu Gly Asn Leu
 370 375 380

Ile Lys Met His Ala Ala Asp Leu Glu Lys Pro Met Val Glu Lys Gln
 385 390 395 400

Asp Gln Ser Pro Ser Leu Arg Thr Gly Glu Glu Lys Lys Asp Val Ser
 405 410 415

Ile Ser Arg Leu Arg Glu Ala Phe Ser Leu Arg His Thr Thr Glu Asn
 420 425 430

Lys Pro His Ser Pro Lys Thr Pro Glu Pro Arg Arg Ser Pro Leu Gly
 435 440 445

Gln Lys Arg Gly Met Leu Ser Ser Ser Thr Ser Gly Ala Ile Ser Asp
 450 455 460

Lys Gly Val Leu Arg Pro Gln Lys Glu Ala Val Ser Ser Ser His Gly
 465 470 475 480

Pro Ser Asp Pro Thr Asp Arg Ala Glu Val Glu Lys Asp Ser Gly His
 485 490 495

Gly Ser Thr Ser Val Asp Ser Glu Gly Phe Ser Ile Pro Asp Thr Gly
 500 505 510

Ser His Cys Ser Ser Glu Tyr Ala Ala Ser Ser Pro Gly Asp Arg Gly
 515 520 525

Ser Gln Glu His Val Asp Ser Gln Glu Lys Ala Pro Glu Thr Asp Asp
 530 535 540

Ser Phe Ser Asp Val Asp Cys His Ser Asn Gln Glu Asp Thr Gly Cys
 545 550 555 560

Lys Phe Arg Val Leu Pro Gln Pro Thr Asn Leu Ala Thr Pro Asn Thr
 565 570 575

Lys Arg Phe Lys Lys Glu Glu Ile Leu Ser Ser Ser Asp Ile Cys Gln
 580 585 590

Lys Leu Val Asn Thr Gln Asp Met Ser Ala Ser Gln Val Asp Val Ala
 595 600 605

Val Lys Ile Asn Lys Lys Val Val Pro Leu Asp Phe Ser Met Ser Ser
 610 615 620

Leu Ala Lys Arg Ile Lys Gln Leu His His Glu Ala Gln Gln Ser Glu
 625 630 635 640

Gly Glu Gln Asn Tyr Arg Lys Phe Arg Ala Lys Ile Cys Pro Gly Glu
 645 650 655

Asn Gln Ala Ala Glu Asp Glu Leu Arg Lys Glu Ile Ser Lys Thr Met

660

665

670

Phe Ala Glu Met Glu Ile Ile Gly Gln Phe Asn Leu Gly Phe Ile Ile
 675 680 685

Thr Lys Leu Asn Glu Asp Ile Phe Ile Val Asp Gln His Ala Thr Asp
 690 695 700

Glu Lys Tyr Asn Phe Glu Met Leu Gln Gln His Thr Val Leu Gln Gly
 705 710 715 720

Gln Arg Leu Ile Ala Pro Gln Thr Leu Asn Leu Thr Ala Val Asn Glu
 725 730 735

Ala Val Leu Ile Glu Asn Leu Glu Ile Phe Arg Lys Asn Gly Phe Asp
 740 745 750

Phe Val Ile Asp Glu Asn Ala Pro Val Thr Glu Arg Ala Lys Leu Ile
 755 760 765

Ser Leu Pro Thr Ser Lys Asn Trp Thr Phe Gly Pro Gln Asp Val Asp
 770 775 780

Glu Leu Ile Phe Met Leu Ser Asp Ser Pro Gly Val Met Cys Arg Pro
 785 790 795 800

Ser Arg Val Lys Gln Met Phe Ala Ser Arg Ala Cys Arg Lys Ser Val
 805 810 815

Met Ile Gly Thr Ala Leu Asn Thr Ser Glu Met Lys Lys Leu Ile Thr
 820 825 830

His Met Gly Glu Met Asp His Pro Trp Asn Cys Pro His Gly Arg Pro
 835 840 845

Thr Met Arg His Ile Ala Asn Leu Gly Val Ile Ser Gln Asn
 850 855 860

<210> 2975

<211> 1256

<212> PRT

<213> Homo sapiens

<400> 2975

Met Tyr Leu Trp Leu Lys Leu Leu Ala Phe Gly Phe Ala Phe Leu Asp
 1 5 10 15

Thr Glu Val Phe Val Thr Gly Gln Ser Pro Thr Pro Ser Pro Thr Gly
 20 25 30

Leu Thr Thr Ala Lys Met Pro Ser Val Pro Leu Ser Ser Asp Pro Leu
 35 40 45

Pro Thr His Thr Thr Ala Phe Ser Pro Ala Ser Thr Phe Glu Arg Glu
 50 55 60

Asn Asp Phe Ser Glu Thr Thr Thr Ser Leu Ser Pro Asp Asn Thr Ser
 65 70 75 80

Thr Gln Val Ser Pro Asp Ser Leu Asp Asn Ala Ser Ala Phe Asn Thr
 85 90 95

Thr Gly Val Ser Ser Val Gln Thr Pro His Leu Pro Thr His Ala Asp
 100 105 110

Ser Gln Thr Pro Ser Ala Gly Thr Asp Thr Gln Thr Phe Ser Gly Ser
 115 120 125

Ala Ala Asn Ala Lys Leu Asn Pro Thr Pro Gly Ser Asn Ala Ile Ser
 130 135 140

Asp Ala Tyr Leu Asn Ala Ser Glu Thr Thr Thr Leu Ser Pro Ser Gly
 145 150 155 160

Ser Ala Val Ile Ser Thr Thr Thr Ile Ala Thr Thr Pro Ser Lys Pro
 165 170 175

Thr Cys Asp Glu Lys Tyr Ala Asn Ile Thr Val Asp Tyr Leu Tyr Asn
 180 185 190

Lys Glu Thr Lys Leu Phe Thr Ala Lys Leu Asn Val Asn Glu Asn Val
 195 200 205

Glu Cys Gly Asn Asn Thr Cys Thr Asn Asn Glu Val His Asn Leu Thr
 210 215 220

Glu Cys Lys Asn Ala Ser Val Ser Ile Ser His Asn Ser Cys Thr Ala
 225 230 235 240

Pro Asp Lys Thr Leu Ile Leu Asp Val Pro Pro Gly Val Glu Lys Phe
 245 250 255

Gln Leu His Asp Cys Thr Gln Val Glu Lys Ala Asp Thr Thr Ile Cys
 260 265 270

Leu Lys Trp Lys Asn Ile Glu Thr Phe Thr Cys Asp Thr Gln Asn Ile
 275 280 285

Thr Tyr Arg Phe Gln Cys Gly Asn Met Ile Phe Asp Asn Lys Glu Ile
 290 295 300

Lys Leu Glu Asn Leu Glu Pro Glu His Glu Tyr Lys Cys Asp Ser Glu
 305 310 315 320

Ile Leu Tyr Asn Asn His Lys Phe Thr Asn Ala Ser Lys Ile Ile Lys
 325 330 335

Thr Asp Phe Gly Ser Pro Gly Glu Pro Gln Ile Ile Phe Cys Arg Ser
 340 345 350

Glu Ala Ala His Gln Gly Val Ile Thr Trp Asn Pro Pro Gln Arg Ser
 355 360 365

Phe His Asn Phe Thr Leu Cys Tyr Ile Lys Glu Thr Glu Lys Asp Cys
 370 375 380

Leu Asn Leu Asp Lys Asn Leu Ile Lys Tyr Asp Leu Gln Asn Leu Lys
 385 390 395 400

Pro Tyr Thr Lys Tyr Val Leu Ser Leu His Ala Tyr Ile Ile Ala Lys
 405 410 415

Val Gln Arg Asn Gly Ser Ala Ala Met Cys His Phe Thr Thr Lys Ser
 420 425 430

Ala Pro Pro Ser Gln Val Trp Asn Met Thr Val Ser Met Thr Ser Asp
 435 440 445

Asn Ser Met His Val Lys Cys Arg Pro Pro Arg Asp Arg Asn Gly Pro
 450 455 460

His Glu Arg Tyr His Leu Glu Val Glu Ala Gly Asn Thr Leu Val Arg
 465 470 475 480

Asn Glu Ser His Lys Asn Cys Asp Phe Arg Val Lys Asp Leu Gln Tyr
 485 490 495

Ser Thr Asp Tyr Thr Phe Lys Ala Tyr Phe His Asn Gly Asp Tyr Pro

500					505					510						
Gly	Glu	Pro	Phe	Ile	Leu	His	His	Ser	Thr	Ser	Tyr	Asn	Ser	Lys	Ala	
515					520					525						
Leu	Ile	Ala	Phe	Leu	Ala	Phe	Leu	Ile	Ile	Val	Thr	Ser	Ile	Ala	Leu	
530					535					540						
Leu	Val	Val	Leu	Tyr	Lys	Ile	Tyr	Asp	Leu	His	Lys	Lys	Arg	Ser	Cys	
545					550					555					560	
Asn	Leu	Asp	Glu	Gln	Gln	Glu	Leu	Val	Glu	Arg	Asp	Asp	Glu	Lys	Gln	
565					570					575						
Leu	Met	Asn	Val	Glu	Pro	Ile	His	Ala	Asp	Ile	Leu	Leu	Glu	Thr	Tyr	
580					585					590						
Lys	Arg	Lys	Ile	Ala	Asp	Glu	Gly	Arg	Leu	Phe	Leu	Ala	Glu	Phe	Gln	
595					600					605						
Ser	Ile	Pro	Arg	Val	Phe	Ser	Lys	Phe	Pro	Ile	Lys	Glu	Ala	Arg	Lys	
610					615					620						
Pro	Phe	Asn	Gln	Asn	Lys	Asn	Arg	Tyr	Val	Asp	Ile	Leu	Pro	Tyr	Asp	
625					630					635					640	
Tyr	Asn	Arg	Val	Glu	Leu	Ser	Glu	Ile	Asn	Gly	Asp	Ala	Gly	Ser	Asn	
645					650					655						
Tyr	Ile	Asn	Ala	Ser	Tyr	Ile	Asp	Gly	Phe	Lys	Glu	Pro	Arg	Lys	Tyr	
660					665					670						
Ile	Ala	Ala	Gln	Gly	Pro	Arg	Asp	Glu	Thr	Val	Asp	Asp	Phe	Trp	Arg	
675					680					685						
Met	Ile	Trp	Glu	Gln	Lys	Ala	Thr	Val	Ile	Val	Met	Val	Thr	Arg	Cys	
690					695					700						
Glu	Glu	Gly	Asn	Arg	Asn	Lys	Cys	Ala	Glu	Tyr	Trp	Pro	Ser	Met	Glu	
705					710					715					720	
Glu	Gly	Thr	Arg	Ala	Phe	Gly	Asp	Val	Val	Val	Lys	Ile	Asn	Gln	His	
725					730					735						
Lys	Arg	Cys	Pro	Asp	Tyr	Ile	Ile	Gln	Lys	Leu	Asn	Ile	Val	Asn	Lys	
740					745					750						

Lys Glu Lys Ala Thr Gly Arg Glu Val Thr His Ile Gln Phe Thr Ser
 755 760 765
 Trp Pro Asp His Gly Val Pro Glu Asp Pro His Leu Leu Leu Lys Leu
 770 775 780
 Arg Arg Arg Val Asn Ala Phe Ser Asn Phe Phe Ser Gly Pro Ile Val
 785 790 795 800
 Val His Cys Ser Ala Gly Val Gly Arg Thr Gly Thr Tyr Ile Gly Ile
 805 810 815
 Asp Ala Met Leu Glu Gly Leu Glu Ala Glu Asn Lys Val Asp Val Tyr
 820 825 830
 Gly Tyr Val Val Lys Leu Arg Arg Gln Arg Cys Leu Met Val Gln Val
 835 840 845
 Glu Ala Gln Tyr Ile Leu Ile His Gln Ala Leu Val Glu Tyr Asn Gln
 850 855 860
 Phe Gly Glu Thr Glu Val Asn Leu Ser Glu Leu His Pro Tyr Leu His
 865 870 875 880
 Asn Met Lys Lys Arg Asp Pro Pro Ser Glu Pro Ser Pro Leu Glu Ala
 885 890 895
 Glu Phe Gln Arg Leu Pro Ser Tyr Arg Ser Trp Arg Thr Gln His Ile
 900 905 910
 Gly Asn Gln Glu Glu Asn Lys Ser Lys Asn Arg Asn Ser Asn Val Ile
 915 920 925
 Pro Tyr Asp Tyr Asn Arg Val Pro Leu Lys His Glu Leu Glu Met Ser
 930 935 940
 Lys Glu Ser Glu His Asp Ser Asp Glu Ser Ser Asp Asp Asp Ser Asp
 945 950 955 960
 Ser Glu Glu Pro Ser Lys Tyr Ile Asn Ala Ser Phe Ile Met Ser Tyr
 965 970 975
 Trp Lys Pro Glu Val Met Ile Ala Ala Gln Gly Pro Leu Lys Glu Thr
 980 985 990

Ile Gly Asp Phe Trp Gln Met Ile Phe Gln Arg Lys Val Lys Val Ile
 995 1000 1005

Val Met Leu Thr Glu Leu Lys His Gly Asp Gln Glu Ile Cys Ala
 1010 1015 1020

Gln Tyr Trp Gly Glu Gly Lys Gln Thr Tyr Gly Asp Ile Glu Val
 1025 1030 1035

Asp Leu Lys Asp Thr Asp Lys Ser Ser Thr Tyr Thr Leu Arg Val
 1040 1045 1050

Phe Glu Leu Arg His Ser Lys Arg Lys Asp Ser Arg Thr Val Tyr
 1055 1060 1065

Gln Tyr Gln Tyr Thr Asn Trp Ser Val Glu Gln Leu Pro Ala Glu
 1070 1075 1080

Pro Lys Glu Leu Ile Ser Met Ile Gln Val Val Lys Gln Lys Leu
 1085 1090 1095

Pro Gln Lys Asn Ser Ser Glu Gly Asn Lys His His Lys Ser Thr
 1100 1105 1110

Pro Leu Leu Ile His Cys Arg Asp Gly Ser Gln Gln Thr Gly Ile
 1115 1120 1125

Phe Cys Ala Leu Leu Asn Leu Leu Glu Ser Ala Glu Thr Glu Glu
 1130 1135 1140

Val Val Asp Ile Phe Gln Val Val Lys Ala Leu Arg Lys Ala Arg
 1145 1150 1155

Pro Gly Met Val Ser Thr Phe Glu Gln Tyr Gln Phe Leu Tyr Asp
 1160 1165 1170

Val Ile Ala Ser Thr Tyr Pro Ala Gln Asn Gly Gln Val Lys Lys
 1175 1180 1185

Asn Asn His Gln Glu Asp Lys Ile Glu Phe Asp Asn Glu Val Asp
 1190 1195 1200

Lys Val Lys Gln Asp Ala Asn Cys Val Asn Pro Leu Gly Ala Pro
 1205 1210 1215

Glu Lys Leu Pro Glu Ala Lys Glu Gln Ala Glu Gly Ser Glu Pro
 1220 1225 1230

Thr Ser Gly Thr Glu Gly Pro Glu His Ser Val Asn Gly Pro Ala
 1235 1240 1245

Ser Pro Ala Leu Asn Gln Gly Ser
 1250 1255

<210> 2976
 <211> 319
 <212> PRT
 <213> Homo sapiens

<400> 2976

Met Lys Met Ala Ser Ser Leu Ala Phe Leu Leu Leu Asn Phe His Val
 1 5 10 15

Ser Leu Leu Leu Val Gln Leu Leu Thr Pro Cys Ser Ala Gln Phe Ser
 20 25 30

Val Leu Gly Pro Ser Gly Pro Ile Leu Ala Met Val Gly Glu Asp Ala
 35 40 45

Asp Leu Pro Cys His Leu Phe Pro Thr Met Ser Ala Glu Thr Met Glu
 50 55 60

Leu Lys Trp Val Ser Ser Ser Leu Arg Gln Val Val Asn Val Tyr Ala
 65 70 75 80

Asp Gly Lys Glu Val Glu Asp Arg Gln Ser Ala Pro Tyr Arg Gly Arg
 85 90 95

Thr Ser Ile Leu Arg Asp Gly Ile Thr Ala Gly Lys Ala Ala Leu Arg
 100 105 110

Ile His Asn Val Thr Ala Ser Asp Ser Gly Lys Tyr Leu Cys Tyr Phe
 115 120 125

Gln Asp Gly Asp Phe Tyr Glu Lys Ala Leu Val Glu Leu Lys Val Ala
 130 135 140

Ala Leu Gly Ser Asn Leu His Val Glu Val Lys Gly Tyr Glu Asp Gly
 145 150 155 160

Gly Ile His Leu Glu Cys Arg Ser Thr Gly Trp Tyr Pro Gln Pro Gln
 165 170 175

Ile Gln Trp Ser Asn Ala Lys Gly Glu Asn Ile Pro Ala Val Glu Ala
 180 185 190

Pro Val Val Ala Asp Gly Val Gly Leu Tyr Glu Val Ala Ala Ser Val
 195 200 205

Ile Met Arg Gly Gly Ser Gly Glu Gly Val Ser Cys Ile Ile Arg Asn
 210 215 220

Ser Leu Leu Gly Leu Glu Lys Thr Ala Ser Ile Ser Ile Ala Asp Pro
 225 230 235 240

Phe Phe Arg Ser Ala Gln Pro Trp Ile Ala Ala Leu Ala Gly Thr Leu
 245 250 255

Pro Ile Leu Leu Leu Leu Leu Ala Gly Ala Ser Tyr Phe Leu Trp Arg
 260 265 270

Gln Gln Lys Glu Ile Thr Ala Leu Ser Ser Glu Ile Glu Ser Glu Gln
 275 280 285

Glu Met Lys Glu Met Gly Tyr Ala Ala Thr Glu Arg Glu Ile Ser Leu
 290 295 300

Arg Glu Ser Leu Gln Glu Glu Leu Lys Arg Lys Lys Ser Ser Thr
 305 310 315

<210> 2977
 <211> 240
 <212> PRT
 <213> Homo sapiens

<400> 2977

Met Leu Leu Gln Ser Gln Thr Met Gly Val Ser His Ser Phe Thr Pro
 1 5 10 15

Lys Gly Ile Thr Ile Pro Gln Arg Glu Lys Pro Gly His Met Tyr Gln
 20 25 30

Asn Glu Asp Tyr Leu Gln Asn Gly Leu Pro Thr Glu Thr Thr Val Leu
 35 40 45

Gly Thr Val Gln Ile Leu Cys Cys Leu Leu Ile Ser Ser Leu Gly Ala
 50 55 60

Ile Leu Val Phe Ala Pro Tyr Pro Ser His Phe Asn Pro Ala Ile Ser
65 70 75 80

Thr Thr Leu Met Ser Gly Tyr Pro Phe Leu Gly Ala Leu Cys Phe Gly
85 90 95

Ile Thr Gly Ser Leu Ser Ile Ile Ser Gly Lys Gln Ser Thr Lys Pro
100 105 110

Phe Asp Leu Ser Ser Leu Thr Ser Asn Ala Val Ser Ser Val Thr Ala
115 120 125

Gly Ala Gly Leu Phe Leu Leu Ala Asp Ser Met Val Ala Leu Arg Thr
130 135 140

Ala Ser Gln His Cys Gly Ser Glu Met Asp Tyr Leu Ser Ser Leu Pro
145 150 155 160

Tyr Ser Glu Tyr Tyr Tyr Pro Ile Tyr Glu Ile Lys Asp Cys Leu Leu
165 170 175

Thr Ser Val Ser Leu Thr Gly Val Leu Val Val Met Leu Ile Phe Thr
180 185 190

Val Leu Glu Leu Leu Leu Ala Ala Tyr Ser Ser Val Phe Trp Trp Lys
195 200 205

Gln Leu Tyr Ser Asn Asn Pro Gly Ser Ser Phe Ser Ser Thr Gln Ser
210 215 220

Gln Asp His Ile Gln Gln Val Lys Lys Ser Ser Ser Arg Ser Trp Ile
225 230 235 240

<210> 2978

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2978

Met Val Cys Leu Lys Leu Pro Gly Gly Ser Ser Leu Ala Ala Leu Thr
1 5 10 15

Val Thr Leu Met Val Leu Ser Ser Arg Leu Ala Phe Ala Gly Asp Thr
20 25 30

Arg Pro Arg Phe Leu Glu Leu Arg Lys Ser Glu Cys His Phe Phe Asn
35 40 45

Gly Thr Glu Arg Val Arg Tyr Leu Asp Arg Tyr Phe His Asn Gln Glu
 50 55 60

Glu Phe Leu Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr
 65 70 75 80

Glu Leu Gly Arg Pro Val Ala Glu Ser Trp Asn Ser Gln Lys Asp Leu
 85 90 95

Leu Glu Gln Lys Arg Gly Arg Val Asp Asn Tyr Cys Arg His Asn Tyr
 100 105 110

Gly Val Gly Glu Ser Phe Thr Val Gln Arg Arg Val His Pro Gln Val
 115 120 125

Thr Val Tyr Pro Ala Lys Thr Gln Pro Leu Gln His His Asn Leu Leu
 130 135 140

Val Cys Ser Val Ser Gly Phe Tyr Pro Gly Ser Ile Glu Val Arg Trp
 145 150 155 160

Phe Arg Asn Gly Gln Glu Glu Lys Ala Gly Val Val Ser Thr Gly Leu
 165 170 175

Ile Gln Asn Gly Asp Trp Thr Phe Gln Thr Leu Val Met Leu Glu Thr
 180 185 190

Val Pro Arg Ser Gly Glu Val Tyr Thr Cys Gln Val Glu His Pro Ser
 195 200 205

Val Thr Ser Ala Leu Thr Val Glu Trp Arg Ala Arg Ser Glu Ser Ala
 210 215 220

Gln Ser Lys Met Leu Ser Gly Val Gly Gly Phe Val Leu Gly Leu Leu
 225 230 235 240

Phe Leu Gly Ala Gly Leu Phe Ile Tyr Phe Arg Asn Gln Lys Gly His
 245 250 255

Ser Gly Leu Gln Pro Thr Gly Phe Leu Ser
 260 265

<210> 2979

<211> 325

<212> PRT

<213> Homo sapiens

<400> 2979

Met Pro Ile Thr Arg Met Arg Met Arg Pro Trp Leu Glu Met Gln Ile
 1 5 10 15

Asn Ser Asn Gln Ile Pro Gly Leu Ile Trp Ile Asn Lys Glu Glu Met
 20 25 30

Ile Phe Gln Ile Pro Trp Lys His Ala Ala Lys His Gly Trp Asp Ile
 35 40 45

Asn Lys Asp Ala Cys Leu Phe Arg Ser Trp Ala Ile His Thr Gly Arg
 50 55 60

Tyr Lys Ala Gly Glu Lys Glu Pro Asp Pro Lys Thr Trp Lys Ala Asn
 65 70 75 80

Phe Arg Cys Ala Met Asn Ser Leu Pro Asp Ile Glu Glu Val Lys Asp
 85 90 95

Gln Ser Arg Asn Lys Gly Ser Ser Ala Val Arg Val Tyr Arg Met Leu
 100 105 110

Pro Pro Leu Thr Lys Asn Gln Arg Lys Glu Arg Lys Ser Lys Ser Ser
 115 120 125

Arg Asp Ala Lys Ser Lys Ala Lys Arg Lys Ser Cys Gly Asp Ser Ser
 130 135 140

Pro Asp Thr Phe Ser Asp Gly Leu Ser Ser Ser Thr Leu Pro Asp Asp
 145 150 155 160

His Ser Ser Tyr Thr Val Pro Gly Tyr Met Gln Asp Leu Glu Val Glu
 165 170 175

Gln Ala Leu Thr Pro Ala Leu Ser Pro Cys Ala Val Ser Ser Thr Leu
 180 185 190

Pro Asp Trp His Ile Pro Val Glu Val Val Pro Asp Ser Thr Ser Asp
 195 200 205

Leu Tyr Asn Phe Gln Val Ser Pro Met Pro Ser Thr Ser Glu Ala Thr
 210 215 220

Thr Asp Glu Asp Glu Glu Gly Lys Leu Pro Glu Asp Ile Met Lys Leu

Glu Leu Lys Lys Leu Ile Gly Glu Val Ser Ser Gly Ser Gly Glu Thr
100 105 110

Phe Ser Tyr Pro Asp Phe Leu Arg Met Met Leu Gly Lys Arg Ser Ala
 115 120 125

Ile Leu Lys Met
 130

<210> 2981
 <211> 319
 <212> PRT
 <213> Homo sapiens

<400> 2981

Met Thr Asn Ser Ser Phe Phe Cys Pro Val Tyr Lys Asp Leu Glu Pro
 1 5 10 15

Phe Thr Tyr Phe Phe Tyr Leu Val Phe Leu Val Gly Ile Ile Gly Ser
 20 25 30

Cys Phe Ala Thr Trp Ala Phe Ile Gln Lys Asn Thr Asn His Arg Cys
 35 40 45

Val Ser Ile Tyr Leu Ile Asn Leu Leu Thr Ala Asp Phe Leu Leu Thr
 50 55 60

Leu Ala Leu Pro Val Lys Ile Val Val Asp Leu Gly Val Ala Pro Trp
 65 70 75 80

Lys Leu Lys Ile Phe His Cys Gln Val Thr Ala Cys Leu Ile Tyr Ile
 85 90 95

Asn Met Tyr Leu Ser Ile Ile Phe Leu Ala Phe Val Ser Ile Asp Arg
 100 105 110

Cys Leu Gln Leu Thr His Ser Cys Lys Ile Tyr Arg Ile Gln Glu Pro
 115 120 125

Gly Phe Ala Lys Met Ile Ser Thr Val Val Trp Leu Met Val Leu Leu
 130 135 140

Ile Met Val Pro Asn Met Met Ile Pro Ile Lys Asp Ile Lys Glu Lys
 145 150 155 160

Ser Asn Val Gly Cys Met Glu Phe Lys Lys Glu Phe Gly Arg Asn Trp
 165 170 175

His Leu Leu Thr Asn Phe Ile Cys Val Ala Ile Phe Leu Asn Phe Ser

180

185

190

Ala Ile Ile Leu Ile Ser Asn Cys Leu Val Ile Arg Gln Leu Tyr Arg
 195 200 205

Asn Lys Asp Asn Glu Asn Tyr Pro Asn Val Lys Lys Ala Leu Ile Asn
 210 215 220

Ile Leu Leu Val Thr Thr Gly Tyr Ile Ile Cys Phe Val Pro Tyr His
 225 230 235 240

Ile Val Arg Ile Pro Tyr Thr Leu Ser Gln Thr Glu Val Ile Thr Asp
 245 250 255

Cys Ser Thr Arg Ile Ser Leu Phe Lys Ala Lys Glu Ala Thr Leu Leu
 260 265 270

Leu Ala Val Ser Asn Leu Cys Phe Asp Pro Ile Leu Tyr Tyr His Leu
 275 280 285

Ser Lys Ala Phe Arg Ser Lys Val Thr Glu Thr Phe Ala Ser Pro Lys
 290 295 300

Glu Thr Lys Ala Gln Lys Glu Lys Leu Arg Cys Glu Asn Asn Ala
 305 310 315

<210> 2982

<211> 334

<212> PRT

<213> Homo sapiens

<400> 2982

Met Leu Thr Lys Pro Leu Gln Gly Pro Pro Ala Pro Pro Gly Thr Pro
 1 5 10 15

Thr Pro Pro Pro Gly Gly Lys Asp Arg Glu Ala Phe Glu Ala Glu Tyr
 20 25 30

Arg Leu Gly Pro Leu Leu Gly Lys Gly Gly Phe Gly Thr Val Phe Ala
 35 40 45

Gly His Arg Leu Thr Asp Arg Leu Gln Val Ala Ile Lys Val Ile Pro
 50 55 60

Arg Asn Arg Val Leu Gly Trp Ser Pro Leu Ser Asp Ser Val Thr Cys
 65 70 75 80

Pro Leu Glu Val Ala Leu Leu Trp Lys Val Gly Ala Gly Gly Gly His
 85 90 95

Pro Gly Val Ile Arg Leu Leu Asp Trp Phe Glu Thr Gln Glu Gly Phe
 100 105 110

Met Leu Val Leu Glu Arg Pro Leu Pro Ala Gln Asp Leu Phe Asp Tyr
 115 120 125

Ile Thr Glu Lys Gly Pro Leu Gly Glu Gly Pro Ser Arg Cys Phe Phe
 130 135 140

Gly Gln Val Val Ala Ala Ile Gln His Cys His Ser Arg Gly Val Val
 145 150 155 160

His Arg Asp Ile Lys Asp Glu Asn Ile Leu Ile Asp Leu Arg Arg Gly
 165 170 175

Cys Ala Lys Leu Ile Asp Phe Gly Ser Gly Ala Leu Leu His Asp Glu
 180 185 190

Pro Tyr Thr Asp Phe Asp Gly Thr Arg Val Tyr Ser Pro Pro Glu Trp
 195 200 205

Ile Ser Arg His Gln Tyr His Ala Leu Pro Ala Thr Val Trp Ser Leu
 210 215 220

Gly Ile Leu Leu Tyr Asp Met Val Cys Gly Asp Ile Pro Phe Glu Arg
 225 230 235 240

Asp Gln Glu Ile Leu Glu Ala Glu Leu His Phe Pro Ala His Val Ser
 245 250 255

Pro Asp Cys Cys Ala Leu Ile Arg Arg Cys Leu Ala Pro Lys Pro Ser
 260 265 270

Ser Arg Pro Ser Leu Glu Glu Ile Leu Leu Asp Pro Trp Met Gln Thr
 275 280 285

Pro Ala Glu Asp Val Thr Pro Gln Pro Leu Gln Arg Arg Pro Cys Pro
 290 295 300

Phe Gly Leu Val Leu Ala Thr Leu Ser Leu Ala Trp Pro Gly Leu Ala
 305 310 315 320

Pro Asn Gly Gln Lys Ser His Pro Met Ala Met Ser Gln Gly
 325 330

<210> 2983
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 2983

Met Met Gln Lys Leu Leu Lys Cys Ser Arg Leu Val Leu Ala Leu Ala
 1 5 10 15

Leu Ile Leu Val Leu Glu Ser Ser Val Gln Gly Tyr Pro Thr Gln Arg
 20 25 30

Ala Arg Tyr Gln Trp Val Arg Cys Asn Pro Asp Ser Asn Ser Ala Asn
 35 40 45

Cys Leu Glu Glu Lys Gly Pro Met Phe Glu Leu Leu Pro Gly Glu Ser
 50 55 60

Asn Lys Ile Pro Arg Leu Arg Thr Asp Leu Phe Pro Lys Thr Arg Ile
 65 70 75 80

Gln Asp Leu Asn Arg Ile Phe Pro Leu Ser Glu Asp Tyr Ser Gly Ser
 85 90 95

Gly Phe Gly Ser Gly Ser Gly Ser Gly Ser Gly Ser Gly Ser Gly Phe
 100 105 110

Leu Thr Glu Met Glu Gln Asp Tyr Gln Leu Val Asp Glu Ser Asp Ala
 115 120 125

Phe His Asp Asn Leu Arg Ser Leu Asp Arg Asn Leu Pro Ser Asp Ser
 130 135 140

Gln Asp Leu Gly Gln His Gly Leu Glu Glu Asp Phe Met Leu
 145 150 155

<210> 2984
 <211> 1019
 <212> PRT
 <213> Homo sapiens

<400> 2984

Ala Asp Pro Glu Ser Pro Ile Leu Asp Leu Asp Leu His Leu Pro Leu
 1 5 10 15

Leu Cys Phe Arg Pro Glu Lys Val Leu Gln Ile Leu Thr Cys Ile Leu
 20 25 30
 Thr Glu Gln Arg Ile Val Phe Phe Ser Ser Asp Trp Ala Leu Leu Thr
 35 40 45
 Leu Val Thr Glu Cys Phe Met Ala Tyr Leu Tyr Pro Leu Gln Trp Gln
 50 55 60
 His Pro Phe Val Pro Ile Leu Ser Asp Gln Met Leu Asp Phe Val Met
 65 70 75 80
 Ala Pro Thr Ser Phe Leu Met Gly Cys His Leu Asp His Phe Glu Glu
 85 90 95
 Val Ser Lys Glu Ala Asp Gly Leu Val Leu Ile Asn Ile Asp His Gly
 100 105 110
 Ser Ile Thr Tyr Ser Lys Ser Thr Asp Asp Asn Val Asp Ile Pro Asp
 115 120 125
 Val Pro Leu Leu Ala Ala Gln Thr Phe Ile Gln Arg Val Gln Ser Leu
 130 135 140
 Gln Leu His His Glu Leu His Ala Ala His Leu Leu Ser Ser Thr Asp
 145 150 155 160
 Leu Lys Glu Gly Arg Ala His Arg Arg Ser Trp Gln Gln Lys Leu Asn
 165 170 175
 Cys Gln Ile Gln Gln Thr Thr Leu Gln Leu Leu Val Ser Ile Phe Arg
 180 185 190
 Asp Val Lys Asn His Leu Asn Tyr Glu His Arg Val Phe Asn Ser Glu
 195 200 205
 Glu Phe Leu Lys Thr Arg Ala Pro Gly Asp His Gln Phe Tyr Lys Gln
 210 215 220
 Val Leu Asp Thr Tyr Met Phe His Ser Phe Leu Lys Ala Arg Leu Asn
 225 230 235 240
 Arg Arg Met Asp Ala Phe Ala Gln Met Asp Leu Asp Thr Gln Ser Glu
 245 250 255

Glu Asp Arg Ile Asn Gly Met Leu Leu Ser Pro Arg Arg Pro Thr Val
 260 265 270

Glu Lys Arg Ala Ser Arg Lys Ser Ser His Leu His Val Thr His Arg
 275 280 285

Arg Met Val Val Ser Met Pro Asn Leu Gln Asp Ile Ala Met Pro Glu
 290 295 300

Leu Ala Pro Arg Asn Ser Ser Leu Arg Leu Thr Asp Thr Ala Gly Cys
 305 310 315 320

Arg Gly Ser Ser Ala Val Leu Asn Val Thr Pro Lys Ser Pro Tyr Thr
 325 330 335

Phe Lys Ile Pro Glu Ile His Phe Pro Leu Glu Ser Lys Cys Val Gln
 340 345 350

Ala Tyr His Ala His Phe Val Ser Met Leu Ser Glu Ala Met Cys Phe
 355 360 365

Leu Ala Pro Asp Asn Ser Leu Leu Leu Ala Arg Tyr Leu Tyr Leu Arg
 370 375 380

Gly Leu Val Tyr Leu Met Gln Gly Gln Leu Leu Asn Ala Leu Leu Asp
 385 390 395 400

Phe Gln Asn Leu Tyr Lys Thr Asp Ile Arg Ile Phe Pro Thr Asp Leu
 405 410 415

Val Lys Arg Thr Val Glu Ser Met Ser Ala Pro Glu Trp Glu Gly Ala
 420 425 430

Glu Gln Ala Pro Glu Leu Met Arg Leu Ile Ser Glu Ile Leu Asp Lys
 435 440 445

Pro His Glu Ala Ser Lys Leu Asp Asp His Val Lys Lys Phe Lys Leu
 450 455 460

Pro Lys Lys His Met Gln Leu Gly Asp Phe Met Lys Arg Val Gln Glu
 465 470 475 480

Ser Gly Ile Val Lys Asp Ala Ser Ile Ile His Arg Leu Phe Glu Ala
 485 490 495

Leu Thr Val Gly Gln Glu Lys Gln Ile Asp Pro Glu Thr Phe Lys Asp

500

505

510

Phe Tyr Asn Cys Trp Lys Glu Thr Glu Ala Glu Ala Gln Glu Val Ser
 515 520 525

Leu Pro Trp Leu Val Met Glu His Leu Asp Lys Asn Glu Cys Val Cys
 530 535 540

Lys Leu Ser Ser Ser Val Lys Thr Asn Leu Gly Val Gly Lys Ile Ala
 545 550 555 560

Met Thr Gln Lys Arg Leu Phe Leu Leu Thr Glu Gly Arg Pro Gly Tyr
 565 570 575

Leu Glu Ile Ser Thr Phe Arg Asn Ile Glu Glu Val Arg Arg Thr Thr
 580 585 590

Thr Thr Phe Leu Leu Arg Arg Ile Pro Thr Leu Lys Ile Arg Val Ala
 595 600 605

Ser Lys Lys Glu Val Phe Glu Ala Asn Leu Lys Thr Glu Cys Asp Leu
 610 615 620

Trp His Leu Met Val Lys Glu Met Trp Ala Gly Lys Lys Leu Ala Asp
 625 630 635 640

Asp His Lys Asp Pro His Tyr Val Gln Gln Ala Leu Thr Asn Val Leu
 645 650 655

Leu Met Asp Ala Val Val Gly Thr Leu Gln Ser Pro Gly Ala Ile Tyr
 660 665 670

Ala Ala Ser Lys Leu Ser Tyr Phe Asp Lys Met Ser Asn Glu Met Pro
 675 680 685

Met Thr Leu Pro Glu Thr Thr Leu Glu Thr Leu Lys His Lys Ile Asn
 690 695 700

Pro Ser Ala Gly Glu Ala Phe Pro Gln Ala Val Asp Val Leu Leu Tyr
 705 710 715 720

Thr Pro Gly His Leu Asp Pro Ala Glu Lys Val Glu Asp Ala His Pro
 725 730 735

Lys Leu Trp Cys Ala Leu Ser Glu Gly Lys Val Thr Val Phe Asn Ala
 740 745 750

Ser Ser Trp Thr Ile His Gln His Ser Phe Lys Val Gly Thr Ala Lys
 755 760 765
 Val Asn Cys Met Val Met Ala Asp Gln Asn Gln Val Trp Val Gly Ser
 770 775 780
 Glu Asp Ser Val Ile Tyr Ile Ile Asn Val His Ser Met Ser Cys Asn
 785 790 795 800
 Lys Gln Leu Thr Ala His Cys Ser Ser Val Thr Asp Leu Ile Val Gln
 805 810 815
 Asp Gly Gln Glu Ala Pro Ser Asn Val Tyr Ser Cys Ser Met Asp Gly
 820 825 830
 Met Val Leu Val Trp Asn Val Ser Thr Leu Gln Val Thr Ser Arg Phe
 835 840 845
 Gln Leu Pro Arg Gly Gly Leu Thr Ser Ile Arg Leu His Gly Gly Arg
 850 855 860
 Leu Trp Cys Cys Thr Gly Asn Ser Ile Met Val Met Lys Met Asn Gly
 865 870 875 880
 Ser Leu His Gln Glu Leu Lys Ile Glu Glu Asn Phe Lys Asp Thr Ser
 885 890 895
 Thr Ser Phe Leu Ala Phe Gln Leu Leu Pro Glu Glu Glu Gln Leu Trp
 900 905 910
 Ala Ala Cys Ala Gly Arg Ser Glu Val Tyr Ile Trp Ser Leu Lys Asp
 915 920 925
 Leu Ala Gln Pro Pro Gln Arg Val Pro Leu Glu Asp Cys Ser Glu Ile
 930 935 940
 Asn Cys Met Ile Arg Val Lys Lys Gln Val Trp Val Gly Ser Arg Gly
 945 950 955 960
 Leu Gly Gln Gly Thr Pro Lys Gly Lys Ile Tyr Val Ile Asp Ala Glu
 965 970 975
 Arg Lys Thr Val Glu Lys Glu Leu Val Ala His Met Asp Thr Val Arg
 980 985 990

Thr Leu Cys Ser Ala Glu Asp Arg Tyr Val Leu Ser Gly Ser Gly Arg
 995 1000 1005

Glu Glu Gly Lys Val Ala Ile Trp Lys Gly Glu
 1010 1015

<210> 2985

<211> 783

<212> PRT

<213> Homo sapiens

<400> 2985

Met Ala Lys Tyr Asn Thr Gly Gly Asn Pro Thr Glu Asp Val Ser Val
 1 5 10 15

Asn Ser Arg Pro Phe Arg Val Thr Gly Pro Asn Ser Ser Ser Gly Ile
 20 25 30

Gln Ala Arg Lys Asn Leu Phe Asn Asn Gln Gly Asn Ala Ser Pro Pro
 35 40 45

Ala Gly Pro Ser Asn Val Pro Lys Phe Gly Ser Pro Lys Pro Pro Val
 50 55 60

Ala Val Lys Pro Ser Ser Glu Glu Lys Pro Asp Lys Glu Pro Lys Pro
 65 70 75 80

Pro Phe Leu Lys Pro Thr Gly Ala Gly Gln Arg Phe Gly Thr Pro Ala
 85 90 95

Ser Leu Thr Thr Arg Asp Pro Glu Ala Lys Val Gly Phe Leu Lys Pro
 100 105 110

Val Gly Pro Lys Pro Ile Asn Leu Pro Lys Glu Asp Ser Lys Pro Thr
 115 120 125

Phe Pro Trp Pro Pro Gly Asn Lys Pro Ser Leu His Ser Val Asn Gln
 130 135 140

Asp His Asp Leu Lys Pro Leu Gly Pro Lys Ser Gly Pro Thr Pro Pro
 145 150 155 160

Thr Ser Glu Asn Glu Gln Lys Gln Ala Phe Pro Lys Leu Thr Gly Val
 165 170 175

Lys Gly Lys Phe Met Ser Ala Ser Gln Asp Leu Glu Pro Lys Pro Leu

180	185	190
Phe Pro Lys Pro Ala Phe Gly Gln Lys Pro Pro Leu Ser Thr Glu Asn 195 200 205		
Ser His Glu Asp Glu Ser Pro Met Lys Asn Val Ser Ser Ser Lys Gly 210 215 220		
Ser Pro Ala Pro Leu Gly Val Arg Ser Lys Ser Gly Pro Leu Lys Pro 225 230 235 240		
Ala Arg Glu Asp Ser Glu Asn Lys Asp His Ala Gly Glu Ile Ser Ser 245 250 255		
Leu Pro Phe Pro Gly Val Val Leu Lys Pro Ala Ala Ser Arg Gly Gly 260 265 270		
Leu Gly Leu Ser Lys Asn Gly Glu Glu Lys Lys Glu Asp Arg Lys Ile 275 280 285		
Asp Ala Ala Lys Asn Thr Phe Gln Ser Lys Ile Asn Gln Glu Glu Leu 290 295 300		
Ala Ser Gly Thr Pro Pro Ala Arg Phe Pro Lys Ala Pro Ser Lys Leu 305 310 315 320		
Thr Val Gly Gly Pro Trp Gly Gln Ser Gln Glu Lys Glu Lys Gly Asp 325 330 335		
Lys Asn Ser Ala Thr Pro Lys Gln Lys Pro Leu Pro Pro Leu Phe Thr 340 345 350		
Leu Gly Pro Pro Pro Pro Lys Pro Asn Arg Pro Pro Asn Val Asp Leu 355 360 365		
Thr Lys Phe His Lys Thr Ser Ser Gly Asn Ser Thr Ser Lys Gly Gln 370 375 380		
Thr Ser Tyr Ser Thr Thr Ser Leu Pro Pro Pro Pro Pro Ser His Pro 385 390 395 400		
Ala Ser Gln Pro Pro Leu Pro Ala Ser His Pro Ser Gln Pro Pro Val 405 410 415		
Pro Ser Leu Pro Pro Arg Asn Ile Lys Pro Pro Phe Asp Leu Lys Ser 420 425 430		

Pro Val Asn Glu Asp Asn Gln Asp Gly Val Thr His Ser Asp Gly Ala
 435 440 445
 Gly Asn Leu Asp Glu Glu Gln Asp Ser Glu Gly Glu Thr Tyr Glu Asp
 450 455 460
 Ile Glu Ala Ser Lys Glu Arg Glu Lys Lys Arg Glu Lys Glu Glu Lys
 465 470 475 480
 Lys Arg Leu Glu Leu Glu Lys Lys Glu Gln Lys Glu Lys Glu Lys Lys
 485 490 495
 Glu Gln Glu Ile Lys Lys Lys Phe Lys Leu Thr Gly Pro Ile Gln Val
 500 505 510
 Ile His Leu Ala Lys Ala Cys Cys Asp Val Lys Gly Gly Lys Asn Glu
 515 520 525
 Leu Ser Phe Lys Gln Gly Glu Gln Ile Glu Ile Ile Arg Ile Thr Asp
 530 535 540
 Asn Pro Glu Gly Lys Trp Leu Gly Arg Thr Ala Arg Gly Ser Tyr Gly
 545 550 555 560
 Tyr Ile Lys Thr Thr Ala Val Glu Ile Asp Tyr Asp Ser Leu Lys Leu
 565 570 575
 Lys Lys Asp Ser Leu Gly Ala Pro Ser Arg Pro Ile Glu Asp Asp Gln
 580 585 590
 Glu Val Tyr Asp Asp Val Ala Glu Gln Asp Asp Ile Ser Ser His Ser
 595 600 605
 Gln Ser Gly Ser Gly Gly Ile Phe Pro Pro Pro Pro Asp Asp Asp Ile
 610 615 620
 Tyr Asp Gly Ile Glu Glu Glu Asp Ala Asp Asp Gly Phe Pro Ala Pro
 625 630 635 640
 Pro Lys Gln Leu Asp Met Gly Asp Glu Val Tyr Asp Asp Val Asp Thr
 645 650 655
 Ser Asp Phe Pro Val Ser Ser Ala Glu Met Ser Gln Gly Thr Asn Phe
 660 665 670

Gly Lys Ala Lys Thr Glu Glu Lys Asp Leu Lys Lys Leu Lys Lys Gln
 675 680 685

Glu Lys Glu Glu Lys Asp Phe Arg Lys Lys Phe Lys Tyr Asp Gly Glu
 690 695 700

Ile Arg Val Leu Tyr Ser Thr Lys Val Thr Thr Ser Ile Thr Ser Lys
 705 710 715 720

Lys Trp Gly Thr Arg Asp Leu Gln Val Lys Pro Gly Glu Ser Leu Glu
 725 730 735

Val Ile Gln Thr Thr Asp Asp Thr Lys Val Leu Cys Arg Asn Glu Glu
 740 745 750

Gly Lys Tyr Gly Tyr Val Leu Arg Ser Tyr Leu Ala Asp Asn Asp Gly
 755 760 765

Glu Ile Tyr Asp Asp Ile Ala Asp Gly Cys Ile Tyr Asp Asn Asp
 770 775 780

<210> 2986
 <211> 266
 <212> PRT
 <213> Homo sapiens

<400> 2986

Met Val Cys Leu Lys Leu Pro Gly Gly Ser Ser Leu Ala Ala Leu Thr
 1 5 10 15

Val Thr Leu Met Val Leu Ser Ser Arg Leu Ala Phe Ala Gly Asp Thr
 20 25 30

Arg Pro Arg Phe Leu Glu Leu Arg Lys Ser Glu Cys His Phe Phe Asn
 35 40 45

Gly Thr Glu Arg Val Arg Tyr Leu Asp Arg Tyr Phe His Asn Gln Glu
 50 55 60

Glu Phe Leu Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr
 65 70 75 80

Glu Leu Gly Arg Pro Val Ala Glu Ser Trp Asn Ser Gln Lys Asp Leu
 85 90 95

Leu Glu Gln Lys Arg Gly Arg Val Asp Asn Tyr Cys Arg His Asn Tyr

100 105 110
 Gly Val Gly Glu Ser Phe Thr Val Gln Arg Arg Val His Pro Gln Val
 115 120 125
 Thr Val Tyr Pro Ala Lys Thr Gln Pro Leu Gln His His Asn Leu Leu
 130 135 140
 Val Cys Ser Val Ser Gly Phe Tyr Pro Gly Ser Ile Glu Val Arg Trp
 145 150 155 160
 Phe Arg Asn Gly Gln Glu Glu Lys Ala Gly Val Val Ser Thr Gly Leu
 165 170 175
 Ile Gln Asn Gly Asp Trp Thr Phe Gln Thr Leu Val Met Leu Glu Thr
 180 185 190
 Val Pro Arg Ser Gly Glu Val Tyr Thr Cys Gln Val Glu His Pro Ser
 195 200 205
 Val Thr Ser Ala Leu Thr Val Glu Trp Arg Ala Arg Ser Glu Ser Ala
 210 215 220
 Gln Ser Lys Met Leu Ser Gly Val Gly Gly Phe Val Leu Gly Leu Leu
 225 230 235 240
 Phe Leu Gly Ala Gly Leu Phe Ile Tyr Phe Arg Asn Gln Lys Gly His
 245 250 255
 Ser Gly Leu Gln Pro Thr Gly Phe Leu Ser
 260 265
 <210> 2987
 <211> 363
 <212> PRT
 <213> Homo sapiens
 <400> 2987
 Met Glu Val Lys Lys Lys Lys His Asp Lys Gln Glu Gln Lys Gly Ser
 1 5 10 15
 Val Gly Ala Thr Phe Lys Leu Gly Asp Ser Leu Ser Asn Pro Asn Glu
 20 25 30
 Arg Ala Ile Val Lys Glu Lys Met Val Ser Asn Thr Lys Ser Val Asp
 35 40 45

Thr Lys Ala Ser Ser Ser Lys Phe Ser Arg Ile Leu Thr Pro Lys Glu
 50 55 60

Tyr Leu Gln Arg Gln Lys His Lys Glu Ala Pro Ser Asn Lys Ala Ser
 65 70 75 80

Lys Lys Ile Cys Val Lys Asn Val Pro Cys Asp Ser Glu His Met Arg
 85 90 95

Pro Ser Lys Leu Ala Val Gln Val Glu Ser Cys Gly Lys Ser Asn Glu
 100 105 110

Lys His Ser Ser Gly Val Gln Thr Ser Lys Glu Ser Leu Asn Gly Leu
 115 120 125

Thr Ser His Gly Lys Asn Leu Lys Ile His His Ser Gln Glu Ser Lys
 130 135 140

Thr Tyr Asn Ile Leu Arg Asn Val Lys Glu Lys Val Gly Gly Lys Gln
 145 150 155 160

Pro Asp Lys Ile Trp Ile Asp Lys Thr Lys Leu Asp Lys Leu Thr Asn
 165 170 175

Ile Ser Asn Glu Ala Gln Phe Ser Gln Met Pro Pro Gln Val Lys Asp
 180 185 190

Gln Lys Lys Leu Tyr Leu Asn Arg Val Gly Phe Lys Cys Thr Glu Arg
 195 200 205

Glu Ser Ile Ser Leu Thr Lys Leu Glu Ser Ser Pro Arg Lys Leu His
 210 215 220

Lys Asp Lys Arg Gln Glu Asn Lys His Lys Thr Phe Leu Pro Val Lys
 225 230 235 240

Gly Asn Thr Glu Lys Ser Asn Met Leu Glu Phe Lys Leu Cys Pro Asp
 245 250 255

Ile Leu Leu Lys Asn Thr Asn Ser Val Glu Glu Arg Lys Asp Val Lys
 260 265 270

Pro His Pro Arg Lys Glu Gln Ala Pro Leu Gln Val Ser Gly Ile Lys
 275 280 285

Ser Thr Lys Glu Asp Trp Leu Lys Phe Val Ala Thr Lys Lys Arg Thr
 290 295 300

Gln Lys Asp Ser Gln Glu Arg Asp Asn Val Asn Ser Arg Leu Ser Lys
 305 310 315 320

Arg Ser Phe Ser Ala Asp Gly Phe Glu Met Leu Gln Asn Pro Val Lys
 325 330 335

Asp Ser Lys Glu Met Phe Gln Thr Tyr Lys Gln Met Tyr Leu Glu Lys
 340 345 350

Arg Ser Arg Ser Leu Gly Ser Ser Pro Val Lys
 355 360

<210> 2988
 <211> 836
 <212> PRT
 <213> Homo sapiens

<400> 2988

Met Ala Arg Leu Gly Asn Cys Ser Leu Thr Trp Ala Ala Leu Ile Ile
 1 5 10 15

Leu Leu Leu Pro Gly Ser Leu Glu Glu Cys Gly His Ile Ser Val Ser
 20 25 30

Ala Pro Ile Val His Leu Gly Asp Pro Ile Thr Ala Ser Cys Ile Ile
 35 40 45

Lys Gln Asn Cys Ser His Leu Asp Pro Glu Pro Gln Ile Leu Trp Arg
 50 55 60

Leu Gly Ala Glu Leu Gln Pro Gly Gly Arg Gln Gln Arg Leu Ser Asp
 65 70 75 80

Gly Thr Gln Glu Ser Ile Ile Thr Leu Pro His Leu Asn His Thr Gln
 85 90 95

Ala Phe Leu Ser Cys Cys Leu Asn Trp Gly Asn Ser Leu Gln Ile Leu
 100 105 110

Asp Gln Val Glu Leu Arg Ala Gly Tyr Pro Pro Ala Ile Pro His Asn
 115 120 125

Leu Ser Cys Leu Met Asn Leu Thr Thr Ser Ser Leu Ile Cys Gln Trp
 130 135 140

Glu Pro Gly Pro Glu Thr His Leu Pro Thr Ser Phe Thr Leu Lys Ser
145 150 155 160

Phe Lys Ser Arg Gly Asn Cys Gln Thr Gln Gly Asp Ser Ile Leu Asp
165 170 175

Cys Val Pro Lys Asp Gly Gln Ser His Cys Cys Ile Pro Arg Lys His
180 185 190

Leu Leu Leu Tyr Gln Asn Met Gly Ile Trp Val Gln Ala Glu Asn Ala
195 200 205

Leu Gly Thr Ser Met Ser Pro Gln Leu Cys Leu Asp Pro Met Asp Val
210 215 220

Val Lys Leu Glu Pro Pro Met Leu Arg Thr Met Asp Pro Ser Pro Glu
225 230 235 240

Ala Ala Pro Pro Gln Ala Gly Cys Leu Gln Leu Cys Trp Glu Pro Trp
245 250 255

Gln Pro Gly Leu His Ile Asn Gln Lys Cys Glu Leu Arg His Lys Pro
260 265 270

Gln Arg Gly Glu Ala Ser Trp Ala Leu Val Gly Pro Leu Pro Leu Glu
275 280 285

Ala Leu Gln Tyr Glu Leu Cys Gly Leu Leu Pro Ala Thr Ala Tyr Thr
290 295 300

Leu Gln Ile Arg Cys Ile Arg Trp Pro Leu Pro Gly His Trp Ser Asp
305 310 315 320

Trp Ser Pro Ser Leu Glu Leu Arg Thr Thr Glu Arg Ala Pro Thr Val
325 330 335

Arg Leu Asp Thr Trp Trp Arg Gln Arg Gln Leu Asp Pro Arg Thr Val
340 345 350

Gln Leu Phe Trp Lys Pro Val Pro Leu Glu Glu Asp Ser Gly Arg Ile
355 360 365

Gln Gly Tyr Val Val Ser Trp Arg Pro Ser Gly Gln Ala Gly Ala Ile
370 375 380

Leu Pro Leu Cys Asn Thr Thr Glu Leu Ser Cys Thr Phe His Leu Pro
385 390 395 400

Ser Glu Ala Gln Glu Val Ala Leu Val Ala Tyr Asn Ser Ala Gly Thr
405 410 415

Ser Arg Pro Thr Pro Val Val Phe Ser Glu Ser Arg Gly Pro Ala Leu
420 425 430

Thr Arg Leu His Ala Met Ala Arg Asp Pro His Ser Leu Trp Val Gly
435 440 445

Trp Glu Pro Pro Asn Pro Trp Pro Gln Gly Tyr Val Ile Glu Trp Gly
450 455 460

Leu Gly Pro Pro Ser Ala Ser Asn Ser Asn Lys Thr Trp Arg Met Glu
465 470 475 480

Gln Asn Gly Arg Ala Thr Gly Phe Leu Leu Lys Glu Asn Ile Arg Pro
485 490 495

Phe Gln Leu Tyr Glu Ile Ile Val Thr Pro Leu Tyr Gln Asp Thr Met
500 505 510

Gly Pro Ser Gln His Val Tyr Ala Tyr Ser Gln Glu Met Ala Pro Ser
515 520 525

His Ala Pro Glu Leu His Leu Lys His Ile Gly Lys Thr Trp Ala Gln
530 535 540

Leu Glu Trp Val Pro Glu Pro Pro Glu Leu Gly Lys Ser Pro Leu Thr
545 550 555 560

His Tyr Thr Ile Phe Trp Thr Asn Ala Gln Asn Gln Ser Phe Ser Ala
565 570 575

Ile Leu Asn Ala Ser Ser Arg Gly Phe Val Leu His Gly Leu Glu Pro
580 585 590

Ala Ser Leu Tyr His Ile His Leu Met Ala Ala Ser Gln Ala Gly Ala
595 600 605

Thr Asn Ser Thr Val Leu Thr Leu Met Thr Leu Thr Pro Glu Gly Ser
610 615 620

Glu Leu His Ile Ile Leu Gly Leu Phe Gly Leu Leu Leu Leu Thr
 625 630 635 640

Cys Leu Cys Gly Thr Ala Trp Leu Cys Cys Ser Pro Asn Arg Lys Asn
 645 650 655

Pro Leu Trp Pro Ser Val Pro Asp Pro Ala His Ser Ser Leu Gly Ser
 660 665 670

Trp Val Pro Thr Ile Met Glu Glu Asp Ala Phe Gln Leu Pro Gly Leu
 675 680 685

Gly Thr Pro Pro Ile Thr Lys Leu Thr Val Leu Glu Glu Asp Glu Lys
 690 695 700

Lys Pro Val Pro Trp Glu Ser His Asn Ser Ser Glu Thr Cys Gly Leu
 705 710 715 720

Pro Thr Leu Val Gln Thr Tyr Val Leu Gln Gly Asp Pro Arg Ala Val
 725 730 735

Ser Thr Gln Pro Gln Ser Gln Ser Gly Thr Ser Asp Gln Val Leu Tyr
 740 745 750

Gly Gln Leu Leu Gly Ser Pro Thr Ser Pro Gly Pro Gly His Tyr Leu
 755 760 765

Arg Cys Asp Ser Thr Gln Pro Leu Leu Ala Gly Leu Thr Pro Ser Pro
 770 775 780

Lys Ser Tyr Glu Asn Leu Trp Phe Gln Ala Ser Pro Leu Gly Thr Leu
 785 790 795 800

Val Thr Pro Ala Pro Ser Gln Glu Asp Asp Cys Val Phe Gly Pro Leu
 805 810 815

Leu Asn Phe Pro Leu Leu Gln Gly Ile Arg Val His Gly Met Glu Ala
 820 825 830

Leu Gly Ser Phe
 835

<210> 2989

<211> 276

<212> PRT

<213> Homo sapiens

<400> 2989

Met Gly Asn Ser Met Lys Ser Thr Pro Ala Pro Ala Glu Arg Pro Leu
 1 5 10 15

Pro Asn Pro Glu Gly Leu Asp Ser Asp Phe Leu Ala Val Leu Ser Asp
 20 25 30

Tyr Pro Ser Pro Asp Ile Ser Pro Pro Ile Phe Arg Arg Gly Glu Lys
 35 40 45

Leu Arg Val Ile Ser Asp Glu Gly Gly Trp Trp Lys Ala Ile Ser Leu
 50 55 60

Ser Thr Gly Arg Glu Ser Tyr Ile Pro Gly Ile Cys Val Ala Arg Val
 65 70 75 80

Tyr His Gly Trp Leu Phe Glu Gly Leu Gly Arg Asp Lys Ala Glu Glu
 85 90 95

Leu Leu Gln Leu Pro Asp Thr Lys Val Gly Ser Phe Met Ile Arg Glu
 100 105 110

Ser Glu Thr Lys Lys Gly Phe Tyr Ser Leu Ser Val Arg His Arg Gln
 115 120 125

Val Lys His Tyr Arg Ile Phe Arg Leu Pro Asn Asn Trp Tyr Tyr Ile
 130 135 140

Ser Pro Arg Leu Thr Phe Gln Cys Leu Glu Asp Leu Val Asn His Tyr
 145 150 155 160

Ser Glu Val Ala Asp Gly Leu Cys Cys Val Leu Thr Thr Pro Cys Leu
 165 170 175

Thr Gln Ser Thr Ala Ala Pro Ala Val Arg Ala Ser Ser Ser Pro Val
 180 185 190

Thr Leu Arg Gln Lys Thr Val Asp Trp Arg Arg Val Ser Arg Leu Gln
 195 200 205

Glu Asp Pro Glu Gly Thr Glu Asn Pro Leu Gly Val Asp Glu Ser Leu
 210 215 220

Phe Ser Tyr Gly Leu Arg Glu Ser Ile Ala Ser Tyr Leu Ser Leu Thr
 225 230 235 240

Ser Glu Asp Asn Thr Ser Phe Asp Arg Lys Lys Lys Ser Ile Ser Leu
 245 250 255

Met Tyr Gly Gly Ser Lys Arg Lys Ser Ser Phe Phe Ser Ser Pro Pro
 260 265 270

Tyr Phe Glu Asp
 275

<210> 2990
 <211> 359
 <212> PRT
 <213> Homo sapiens

<400> 2990

Met Ala Pro Asn Gly Thr Ala Ser Ser Phe Cys Leu Asp Ser Thr Ala
 1 5 10 15

Cys Lys Ile Thr Ile Thr Val Val Leu Ala Val Leu Ile Leu Ile Thr
 20 25 30

Val Ala Gly Asn Val Val Val Cys Leu Ala Val Gly Leu Asn Arg Arg
 35 40 45

Leu Arg Asn Leu Thr Asn Cys Phe Ile Val Ser Leu Ala Ile Thr Asp
 50 55 60

Leu Leu Leu Gly Leu Leu Val Leu Pro Phe Ser Ala Ile Tyr Gln Leu
 65 70 75 80

Ser Cys Lys Trp Ser Phe Gly Lys Val Phe Cys Asn Ile Tyr Thr Ser
 85 90 95

Leu Asp Val Met Leu Cys Thr Ala Ser Ile Leu Asn Leu Phe Met Ile
 100 105 110

Ser Leu Asp Arg Tyr Cys Ala Val Met Asp Pro Leu Arg Tyr Pro Val
 115 120 125

Leu Val Thr Pro Val Arg Val Ala Ile Ser Leu Val Leu Ile Trp Val
 130 135 140

Ile Ser Ile Thr Leu Ser Phe Leu Ser Ile His Leu Gly Trp Asn Ser
 145 150 155 160

Arg Asn Glu Thr Ser Lys Gly Asn His Thr Thr Ser Lys Cys Lys Val

165

170

175

Gln Val Asn Glu Val Tyr Gly Leu Val Asp Gly Leu Val Thr Phe Tyr
 180 185 190

Leu Pro Leu Leu Ile Met Cys Ile Thr Tyr Tyr Arg Ile Phe Lys Val
 195 200 205

Ala Arg Asp Gln Ala Lys Arg Ile Asn His Ile Ser Ser Trp Lys Ala
 210 215 220

Ala Thr Ile Arg Glu His Lys Ala Thr Val Thr Leu Ala Ala Val Met
 225 230 235 240

Gly Ala Phe Ile Ile Cys Trp Phe Pro Tyr Phe Thr Ala Phe Val Tyr
 245 250 255

Arg Gly Leu Arg Gly Asp Asp Ala Ile Asn Glu Val Leu Glu Ala Ile
 260 265 270

Val Leu Trp Leu Gly Tyr Ala Asn Ser Ala Leu Asn Pro Ile Leu Tyr
 275 280 285

Ala Ala Leu Asn Arg Asp Phe Arg Thr Gly Tyr Gln Gln Leu Phe Cys
 290 295 300

Cys Arg Leu Ala Asn Arg Asn Ser His Lys Thr Ser Leu Arg Ser Asn
 305 310 315 320

Ala Ser Gln Leu Ser Arg Thr Gln Ser Arg Glu Pro Arg Gln Gln Glu
 325 330 335

Glu Lys Pro Leu Lys Leu Gln Val Trp Ser Gly Thr Glu Val Thr Ala
 340 345 350

Pro Gln Gly Ala Thr Asp Arg
 355

<210> 2991
 <211> 505
 <212> PRT
 <213> Homo sapiens

<400> 2991

Met Gly Ser Met Lys Ser Lys Phe Leu Gln Val Gly Gly Asn Thr Phe
 1 5 10 15

Ser Lys Thr Glu Thr Ser Ala Ser Pro His Cys Pro Val Tyr Val Pro
 20 25 30
 Asp Pro Thr Ser Thr Ile Lys Pro Gly Pro Asn Ser His Asn Ser Asn
 35 40 45
 Thr Pro Gly Ile Arg Glu Ala Gly Ser Glu Asp Ile Ile Val Val Ala
 50 55 60
 Leu Tyr Asp Tyr Glu Ala Ile His His Glu Asp Leu Ser Phe Gln Lys
 65 70 75 80
 Gly Asp Gln Met Val Val Leu Glu Glu Ser Gly Glu Trp Trp Lys Ala
 85 90 95
 Arg Ser Leu Ala Thr Arg Lys Glu Gly Tyr Ile Pro Ser Asn Tyr Val
 100 105 110
 Ala Arg Val Asp Ser Leu Glu Thr Glu Glu Trp Phe Phe Lys Gly Ile
 115 120 125
 Ser Arg Lys Asp Ala Glu Arg Gln Leu Leu Ala Pro Gly Asn Met Leu
 130 135 140
 Gly Ser Phe Met Ile Arg Asp Ser Glu Thr Thr Lys Gly Ser Tyr Ser
 145 150 155 160
 Leu Ser Val Arg Asp Tyr Asp Pro Arg Gln Gly Asp Thr Val Lys His
 165 170 175
 Tyr Lys Ile Arg Thr Leu Asp Asn Gly Gly Phe Tyr Ile Ser Pro Arg
 180 185 190
 Ser Thr Phe Ser Thr Leu Gln Glu Leu Val Asp His Tyr Lys Lys Gly
 195 200 205
 Asn Asp Gly Leu Cys Gln Lys Leu Ser Val Pro Cys Met Ser Ser Lys
 210 215 220
 Pro Gln Lys Pro Trp Glu Lys Asp Ala Trp Glu Ile Pro Arg Glu Ser
 225 230 235 240
 Leu Lys Leu Glu Lys Lys Leu Gly Ala Gly Gln Phe Gly Glu Val Trp
 245 250 255

Met Ala Thr Tyr Asn Lys His Thr Lys Val Ala Val Lys Thr Met Lys
 260 265 270

Pro Gly Ser Met Ser Val Glu Ala Phe Leu Ala Glu Ala Asn Val Met
 275 280 285

Lys Thr Leu Gln His Asp Lys Leu Val Lys Leu His Ala Val Val Thr
 290 295 300

Lys Glu Pro Ile Tyr Ile Ile Thr Glu Phe Met Ala Lys Gly Ser Leu
 305 310 315 320

Leu Asp Phe Leu Lys Ser Asp Glu Gly Ser Lys Gln Pro Leu Pro Lys
 325 330 335

Leu Ile Asp Phe Ser Ala Gln Ile Ala Glu Gly Met Ala Phe Ile Glu
 340 345 350

Gln Arg Asn Tyr Ile His Arg Asp Leu Arg Ala Ala Asn Ile Leu Val
 355 360 365

Ser Ala Ser Leu Val Cys Lys Ile Ala Asp Phe Gly Leu Ala Arg Val
 370 375 380

Ile Glu Asp Asn Glu Tyr Thr Ala Arg Glu Gly Ala Lys Phe Pro Ile
 385 390 395 400

Lys Trp Thr Ala Pro Glu Ala Ile Asn Phe Gly Ser Phe Thr Ile Lys
 405 410 415

Ser Asp Val Trp Ser Phe Gly Ile Leu Leu Met Glu Ile Val Thr Tyr
 420 425 430

Gly Arg Ile Pro Tyr Pro Gly Met Ser Asn Pro Glu Val Ile Arg Ala
 435 440 445

Leu Glu Arg Gly Tyr Arg Met Pro Arg Pro Glu Asn Cys Pro Glu Glu
 450 455 460

Leu Tyr Asn Ile Met Met Arg Cys Trp Lys Asn Arg Pro Glu Glu Arg
 465 470 475 480

Pro Thr Phe Glu Tyr Ile Gln Ser Val Leu Asp Asp Phe Tyr Thr Ala
 485 490 495

Thr Glu Ser Gln Tyr Gln Gln Gln Pro

500

505

<210> 2992
 <211> 1333
 <212> PRT
 <213> Homo sapiens

<400> 2992

Met Thr Ala Asp Lys Leu Val Phe Phe Val Asn Gly Arg Lys Val Val
 1 5 10 15

Glu Lys Asn Ala Asp Pro Glu Thr Thr Leu Leu Ala Tyr Leu Arg Arg
 20 25 30

Lys Leu Gly Leu Ser Gly Thr Lys Leu Gly Cys Gly Glu Gly Gly Cys
 35 40 45

Gly Ala Cys Thr Val Met Leu Ser Lys Tyr Asp Arg Leu Gln Asn Lys
 50 55 60

Ile Val His Phe Ser Ala Asn Ala Cys Leu Ala Pro Ile Cys Ser Leu
 65 70 75 80

His His Val Ala Val Thr Thr Val Glu Gly Ile Gly Ser Thr Lys Thr
 85 90 95

Arg Leu His Pro Val Gln Glu Arg Ile Ala Lys Ser His Gly Ser Gln
 100 105 110

Cys Gly Phe Cys Thr Pro Gly Ile Val Met Ser Met Tyr Thr Leu Leu
 115 120 125

Arg Asn Gln Pro Glu Pro Thr Met Glu Glu Ile Glu Asn Ala Phe Gln
 130 135 140

Gly Asn Leu Cys Arg Cys Thr Gly Tyr Arg Pro Ile Leu Gln Gly Phe
 145 150 155 160

Arg Thr Phe Ala Arg Asp Gly Gly Cys Cys Gly Gly Asp Gly Asn Asn
 165 170 175

Pro Asn Cys Cys Met Asn Gln Lys Lys Asp His Ser Val Ser His Ser
 180 185 190

Pro Ser Leu Phe Lys Pro Glu Glu Phe Thr Pro Leu Asp Pro Thr Gln
 195 200 205

Glu Pro Ile Phe Pro Pro Glu Leu Leu Arg Leu Lys Asp Thr Pro Arg
 210 215 220

Lys Gln Leu Arg Phe Glu Arg Glu Arg Val Thr Trp Ile Gln Ala Ser
 225 230 235 240

Thr Leu Lys Glu Leu Leu Asp Leu Lys Ala Gln His Pro Asp Ala Lys
 245 250 255

Leu Val Val Gly Asn Thr Glu Ile Gly Ile Glu Met Lys Phe Lys Asn
 260 265 270

Met Leu Phe Pro Met Ile Val Cys Pro Ala Trp Ile Pro Glu Leu Asn
 275 280 285

Ser Val Glu His Gly Pro Asp Gly Ile Ser Phe Gly Ala Ala Cys Pro
 290 295 300

Leu Ser Ile Val Glu Lys Thr Leu Val Asp Ala Val Ala Lys Leu Pro
 305 310 315 320

Ala Gln Lys Thr Glu Val Phe Arg Gly Val Leu Glu Gln Leu Arg Trp
 325 330 335

Phe Ala Gly Lys Gln Val Lys Ser Val Ala Ser Val Gly Gly Asn Ile
 340 345 350

Ile Thr Ala Ser Pro Ile Ser Asp Leu Asn Pro Val Phe Met Ala Ser
 355 360 365

Gly Ala Lys Leu Thr Leu Val Ser Arg Gly Thr Arg Arg Thr Val Gln
 370 375 380

Met Asp His Thr Phe Phe Pro Gly Tyr Arg Lys Thr Leu Leu Ser Pro
 385 390 395 400

Glu Glu Ile Leu Leu Ser Ile Glu Ile Pro Tyr Ser Arg Glu Gly Glu
 405 410 415

Tyr Phe Ser Ala Phe Lys Gln Ala Ser Arg Arg Glu Asp Asp Ile Ala
 420 425 430

Lys Val Thr Ser Gly Met Arg Val Leu Phe Lys Pro Gly Thr Thr Glu
 435 440 445

Val Gln Glu Leu Ala Leu Cys Tyr Gly Gly Met Ala Asn Arg Thr Ile
 450 455 460

Ser Ala Leu Lys Thr Thr Gln Arg Gln Leu Ser Lys Leu Trp Lys Glu
 465 470 475 480

Glu Leu Leu Gln Asp Val Cys Ala Gly Leu Ala Glu Glu Leu His Leu
 485 490 495

Pro Pro Asp Ala Pro Gly Gly Met Val Asp Phe Arg Cys Thr Leu Thr
 500 505 510

Leu Ser Phe Phe Phe Lys Phe Tyr Leu Thr Val Leu Gln Lys Leu Gly
 515 520 525

Gln Glu Asn Leu Glu Asp Lys Cys Gly Lys Leu Asp Pro Thr Phe Ala
 530 535 540

Ser Ala Thr Leu Leu Phe Gln Lys Asp Pro Pro Ala Asp Val Gln Leu
 545 550 555 560

Phe Gln Glu Val Pro Lys Gly Gln Ser Glu Glu Asp Met Val Gly Arg
 565 570 575

Pro Leu Pro His Leu Ala Ala Asp Met Gln Ala Ser Gly Glu Ala Val
 580 585 590

Tyr Cys Asp Asp Ile Pro Arg Tyr Glu Asn Glu Leu Ser Leu Arg Leu
 595 600 605

Val Thr Ser Thr Arg Ala His Ala Lys Ile Lys Ser Ile Asp Thr Ser
 610 615 620

Glu Ala Lys Lys Val Pro Gly Phe Val Cys Phe Ile Ser Ala Asp Asp
 625 630 635 640

Val Pro Gly Ser Asn Ile Thr Gly Ile Cys Asn Asp Glu Thr Val Phe
 645 650 655

Ala Lys Asp Lys Val Thr Cys Val Gly His Ile Ile Gly Ala Val Val
 660 665 670

Ala Asp Thr Pro Glu His Thr Gln Arg Ala Ala Gln Gly Val Lys Ile
 675 680 685

Thr Tyr Glu Glu Leu Pro Ala Ile Ile Thr Ile Glu Asp Ala Ile Lys

690

695

700

Asn Asn Ser Phe Tyr Gly Pro Glu Leu Lys Ile Glu Lys Gly Asp Leu
 705 710 715 720

Lys Lys Gly Phe Ser Glu Ala Asp Asn Val Val Ser Gly Glu Ile Tyr
 725 730 735

Ile Gly Gly Gln Glu His Phe Tyr Leu Glu Thr His Cys Thr Ile Ala
 740 745 750

Val Pro Lys Gly Glu Ala Gly Glu Met Glu Leu Phe Val Ser Thr Gln
 755 760 765

Asn Thr Met Lys Thr Gln Ser Phe Val Ala Lys Met Leu Gly Val Pro
 770 775 780

Ala Asn Arg Ile Val Val Arg Val Lys Arg Met Gly Gly Gly Phe Gly
 785 790 795 800

Gly Lys Glu Thr Arg Ser Thr Val Val Ser Thr Ala Val Ala Leu Ala
 805 810 815

Ala Tyr Lys Thr Gly Arg Pro Val Arg Cys Met Leu Asp Arg Asp Glu
 820 825 830

Asp Met Leu Ile Thr Gly Gly Arg His Pro Phe Leu Ala Arg Tyr Lys
 835 840 845

Val Gly Phe Met Lys Thr Gly Thr Val Val Ala Leu Glu Val Asp His
 850 855 860

Phe Ser Asn Val Gly Asn Thr Gln Asp Leu Ser Gln Ser Ile Met Glu
 865 870 875 880

Arg Ala Leu Phe His Met Asp Asn Cys Tyr Lys Ile Pro Asn Ile Arg
 885 890 895

Gly Thr Gly Arg Leu Cys Lys Thr Asn Leu Pro Ser Asn Thr Ala Phe
 900 905 910

Arg Gly Phe Gly Gly Pro Gln Gly Met Leu Ile Ala Glu Cys Trp Met
 915 920 925

Ser Glu Val Ala Val Thr Cys Gly Met Pro Ala Glu Glu Val Arg Arg
 930 935 940

Lys Asn Leu Tyr Lys Glu Gly Asp Leu Thr His Phe Asn Gln Lys Leu
 945 950 955 960

Glu Gly Phe Thr Leu Pro Arg Cys Trp Glu Glu Cys Leu Ala Ser Ser
 965 970 975

Gln Tyr His Ala Arg Lys Ser Glu Val Asp Lys Phe Asn Lys Glu Asn
 980 985 990

Cys Trp Lys Lys Arg Gly Leu Cys Ile Ile Pro Thr Lys Phe Gly Ile
 995 1000 1005

Ser Phe Thr Val Pro Phe Leu Asn Gln Ala Gly Ala Leu Leu His
 1010 1015 1020

Val Tyr Thr Asp Gly Ser Val Leu Leu Thr His Gly Gly Thr Glu
 1025 1030 1035

Met Gly Gln Gly Leu His Thr Lys Met Val Gln Val Ala Ser Arg
 1040 1045 1050

Ala Leu Lys Ile Pro Thr Ser Lys Ile Tyr Ile Ser Glu Thr Ser
 1055 1060 1065

Thr Asn Thr Val Pro Asn Thr Ser Pro Thr Ala Ala Ser Val Ser
 1070 1075 1080

Ala Asp Leu Asn Gly Gln Ala Val Tyr Ala Ala Cys Gln Thr Ile
 1085 1090 1095

Leu Lys Arg Leu Glu Pro Tyr Lys Lys Lys Asn Pro Ser Gly Ser
 1100 1105 1110

Trp Glu Asp Trp Val Thr Ala Ala Tyr Met Asp Thr Val Ser Leu
 1115 1120 1125

Ser Ala Thr Gly Phe Tyr Arg Thr Pro Asn Leu Gly Tyr Ser Phe
 1130 1135 1140

Glu Thr Asn Ser Gly Asn Arg Phe His Tyr Phe Ser Tyr Gly Val
 1145 1150 1155

Ala Cys Ser Glu Val Glu Ile Asp Cys Leu Thr Gly Asp His Lys
 1160 1165 1170

Asn Leu Arg Thr Asp Ile Val Met Asp Val Gly Ser Ser Leu Asn
 1175 1180 1185

Pro Ala Ile Asp Ile Gly Gln Val Glu Gly Ala Phe Val Gln Gly
 1190 1195 1200

Leu Gly Leu Phe Thr Leu Glu Glu Leu His Tyr Ser Pro Glu Gly
 1205 1210 1215

Ser Leu His Thr Arg Gly Pro Ser Thr Tyr Lys Ile Pro Ala Phe
 1220 1225 1230

Gly Ser Ile Pro Ile Glu Phe Arg Val Ser Leu Leu Arg Asp Cys
 1235 1240 1245

Pro Asn Lys Lys Ala Ile Tyr Ala Ser Lys Ala Val Gly Glu Pro
 1250 1255 1260

Pro Leu Phe Leu Ala Ala Ser Ile Phe Phe Ala Ile Lys Asp Ala
 1265 1270 1275

Ile Arg Ala Ala Arg Ala Gln His Thr Gly Asn Asn Val Lys Glu
 1280 1285 1290

Leu Phe Arg Leu Asp Ser Pro Ala Thr Pro Glu Lys Ile Arg Asn
 1295 1300 1305

Ala Cys Val Asp Lys Phe Thr Thr Leu Cys Val Thr Gly Val Pro
 1310 1315 1320

Glu Asn Cys Lys Pro Trp Ser Val Arg Val
 1325 1330

<210> 2993
 <211> 415
 <212> PRT
 <213> Homo sapiens

<400> 2993

Met Glu Gly Lys Ala Ile Ala Thr Ser Leu Gly Gly Asp Arg Val Leu
 1 5 10 15

Ile Phe Pro Cys Ser Pro Arg Ser Ser Phe Val Phe Thr Ser Arg Leu
 20 25 30

Ser Ser Leu Pro Leu Lys Arg Ala Ser Ile Gly Gly Ala Val Ser Cys

35

40

45

Ser Gly Val Asn Gly Leu Thr Arg Trp Asn Ser Ile Val Ser Thr Arg
 50 55 60

Arg Leu Val Pro Val Arg Ser Ile Asn Ser Glu Ser Asp Ser Asp Ser
 65 70 75 80

Asp Phe Pro His Glu Asn Gln Gln Gly Asn Pro Gly Leu Gly Lys Phe
 85 90 95

Lys Glu Tyr Gln Glu Trp Asp Ser Trp Thr Ala Lys Phe Ser Gly Gly
 100 105 110

Ala Asn Ile Pro Phe Leu Met Leu Gln Leu Pro Gln Ile Ile Leu Asn
 115 120 125

Thr Gln Asn Leu Leu Ala Gly Asn Asn Thr Ala Leu Ser Ala Val Pro
 130 135 140

Trp Leu Gly Met Leu Thr Gly Leu Leu Gly Asn Leu Ser Leu Leu Ser
 145 150 155 160

Tyr Phe Ala Lys Lys Arg Glu Lys Glu Ala Ala Val Val Gln Thr Leu
 165 170 175

Gly Val Val Ser Thr His Ile Val Leu Ala Gln Leu Thr Met Ala Glu
 180 185 190

Ala Met Pro Ile Gln Tyr Phe Val Ala Thr Ser Ala Val Val Thr Ile
 195 200 205

Gly Leu Ile Val Asn Cys Leu Tyr Tyr Phe Gly Lys Leu Ser Lys Thr
 210 215 220

Val Trp Gln Leu Trp Glu Asp Val Ile Thr Ile Gly Gly Leu Ser Val
 225 230 235 240

Leu Pro Gln Ile Met Trp Ser Thr Phe Val Pro Leu Val Pro Asn Ser
 245 250 255

Ile Leu Pro Gly Thr Thr Ala Phe Gly Ile Ala Val Ala Ala Ile Ile
 260 265 270

Met Ala Arg Thr Gly Lys Leu Ser Glu Lys Gly Val Arg Phe Val Gly
 275 280 285

Ser Leu Ser Gly Trp Thr Ala Thr Leu Met Phe Met Trp Met Pro Val
 290 295 300

Ser Gln Met Trp Thr Asn Phe Leu Asn Pro Asp Asn Ile Lys Gly Leu
 305 310 315 320

Ser Ser Ile Thr Met Leu Leu Ser Met Met Gly Asn Gly Leu Met Ile
 325 330 335

Pro Arg Ala Leu Phe Ile Arg Asp Leu Met Trp Leu Thr Gly Ser Leu
 340 345 350

Trp Ala Thr Leu Phe Tyr Gly Tyr Gly Asn Ile Leu Cys Leu Tyr Leu
 355 360 365

Val Asn Cys Thr Ser Gln Ser Phe Phe Val Ala Ala Thr Ile Gly Leu
 370 375 380

Ile Ser Trp Ile Gly Leu Ala Leu Trp Arg Asp Ala Val Ala Tyr Gly
 385 390 395 400

His Asn Ser Pro Phe Arg Ser Leu Lys Glu Leu Val Phe Gly Pro
 405 410 415

<210> 2994

<211> 363 - - - - -

<212> PRT

<213> Homo sapiens

<400> 2994

Met Ala Gln Thr Pro Ala Phe Asp Lys Pro Lys Val Glu Leu His Val
 1 5 10 15

His Leu Asp Gly Ser Ile Lys Pro Glu Thr Ile Leu Tyr Tyr Gly Arg
 20 25 30

Arg Arg Gly Ile Ala Leu Pro Ala Asn Thr Ala Glu Gly Leu Leu Asn
 35 40 45

Val Ile Gly Met Asp Lys Pro Leu Thr Leu Pro Asp Phe Leu Ala Lys
 50 55 60

Phe Asp Tyr Tyr Met Pro Ala Ile Ala Gly Cys Arg Glu Ala Ile Lys
 65 70 75 80

Arg Ile Ala Tyr Glu Phe Val Glu Met Lys Ala Lys Glu Gly Val Val
 85 90 95

Tyr Val Glu Val Arg Tyr Ser Pro His Leu Leu Ala Asn Ser Lys Val
 100 105 110

Glu Pro Ile Pro Trp Asn Gln Ala Glu Gly Asp Leu Thr Pro Asp Glu
 115 120 125

Val Val Ala Leu Val Gly Gln Gly Leu Gln Glu Gly Glu Arg Asp Phe
 130 135 140

Gly Val Lys Ala Arg Ser Ile Leu Cys Cys Met Arg His Gln Pro Asn
 145 150 155 160

Trp Ser Pro Lys Val Val Glu Leu Cys Lys Asn Tyr Gln Gln Gln Thr
 165 170 175

Val Val Ala Ile Asp Leu Ala Gly Asp Glu Thr Ile Pro Gly Ser Ser
 180 185 190

Leu Leu Pro Gly His Val Gln Ala Tyr Gln Glu Ala Val Lys Ser Gly
 195 200 205

Ile His Arg Thr Val His Ala Gly Glu Val Gly Ser Ala Glu Val Val
 210 215 220

Lys Glu Ala Val Asp Ile Leu Lys Thr Glu Arg Leu Gly His Gly Tyr
 225 230 235 240

His Thr Leu Glu Asp Gln Ala Leu Tyr Asn Arg Leu Arg Gln Glu Asn
 245 250 255

Met His Phe Glu Ile Cys Pro Trp Ser Ser Tyr Leu Thr Gly Ala Trp
 260 265 270

Lys Pro Asp Thr Glu His Ala Val Ile Arg Leu Lys Asn Asp Gln Ala
 275 280 285

Asn Tyr Ser Leu Asn Thr Asp Asp Pro Leu Ile Phe Lys Ser Thr Leu
 290 295 300

Asp Thr Asp Tyr Gln Met Thr Lys Arg Asp Met Gly Phe Thr Glu Glu
 305 310 315 320

Glu Phe Lys Arg Leu Asn Ile Asn Ala Ala Lys Ser Ser Phe Leu Pro

325

330

335

Glu Asp Glu Lys Arg Glu Leu Leu Asp Leu Leu Tyr Lys Ala Tyr Gly
 340 345 350

Met Pro Pro Ser Ala Ser Ala Gly Gln Asn Leu
 355 360

<210> 2995
 <211> 691
 <212> PRT
 <213> Homo sapiens

<400> 2995

Met Met Arg Asn His Arg Ile Ala Ser Ser Leu Cys Gly Asp Gln Val
 1 5 10 15

Phe Ser Lys Lys Lys Lys Lys Lys Lys Lys Asn Asn Met Ala Ala Lys
 20 25 30

Glu Lys Leu Glu Ala Val Leu Asn Val Ala Leu Arg Val Pro Ser Ile
 35 40 45

Met Leu Leu Asp Val Leu Tyr Arg Trp Asp Val Ser Ser Phe Phe Gln
 50 55 60

Gln Ile Gln Arg Ser Ser Leu Ser Asn Asn Pro Leu Phe Gln Tyr Lys
 65 70 75 80

Tyr Leu Ala Leu Asn Met His Tyr Val Gly Tyr Ile Leu Ser Val Val
 85 90 95

Leu Leu Thr Leu Pro Arg Gln His Leu Val Gln Leu Tyr Leu Tyr Phe
 100 105 110

Leu Thr Ala Leu Leu Leu Tyr Ala Gly His Gln Ile Ser Arg Asp Tyr
 115 120 125

Val Arg Ser Glu Leu Glu Phe Ala Tyr Glu Gly Pro Met Tyr Leu Glu
 130 135 140

Pro Leu Ser Met Asn Arg Phe Thr Thr Ala Leu Ile Gly Gln Leu Val
 145 150 155 160

Val Cys Thr Leu Cys Ser Cys Val Met Lys Thr Lys Gln Ile Trp Leu
 165 170 175

Phe Ser Ala His Met Leu Pro Leu Leu Ala Arg Leu Cys Leu Val Pro
 180 185 190

Leu Glu Thr Ile Val Ile Ile Asn Lys Phe Ala Met Ile Phe Thr Gly
 195 200 205

Leu Glu Val Leu Tyr Phe Leu Gly Ser Asn Leu Leu Val Pro Tyr Asn
 210 215 220

Leu Ala Lys Ser Ala Tyr Arg Glu Leu Val Gln Val Val Glu Val Tyr
 225 230 235 240

Gly Leu Leu Ala Leu Gly Met Ser Leu Trp Asn Gln Leu Val Val Pro
 245 250 255

Val Leu Phe Met Val Phe Trp Leu Val Leu Phe Ala Leu Gln Ile Tyr
 260 265 270

Ser Tyr Phe Ser Thr Arg Asp Gln Pro Ala Ser Arg Glu Arg Leu Leu
 275 280 285

Phe Leu Phe Leu Thr Ser Ile Ala Glu Cys Cys Ser Thr Pro Tyr Ser
 290 295 300

Leu Leu Gly Leu Val Phe Thr Val Ser Phe Val Ala Leu Gly Val Leu
 305 310 315 320

Thr Leu Cys Lys Phe Tyr Leu Gln Gly Tyr Arg Ala Phe Met Asn Asp
 325 330 335

Pro Ala Met Asn Arg Gly Met Thr Glu Gly Val Thr Leu Leu Ile Leu
 340 345 350

Ala Val Gln Thr Gly Leu Ile Glu Leu Gln Val Val His Arg Ala Phe
 355 360 365

Leu Leu Ser Ile Ile Leu Phe Ile Val Val Ala Ser Ile Leu Gln Ser
 370 375 380

Met Leu Glu Ile Ala Asp Pro Ile Val Leu Ala Leu Gly Ala Ser Arg
 385 390 395 400

Asp Lys Ser Leu Trp Lys His Phe Arg Ala Val Ser Leu Cys Leu Phe
 405 410 415

Leu Leu Val Phe Pro Ala Tyr Met Ala Tyr Met Ile Cys Gln Phe Phe
 420 425 430

His Met Asp Phe Trp Leu Leu Ile Ile Ile Ser Ser Ser Ile Leu Thr
 435 440 445

Ser Leu Gln Val Leu Gly Thr Leu Phe Ile Tyr Val Leu Phe Met Val
 450 455 460

Glu Glu Phe Arg Lys Glu Pro Val Glu Asn Met Asp Asp Val Ile Tyr
 465 470 475 480

Tyr Val Asn Gly Thr Tyr Arg Leu Leu Glu Phe Leu Val Ala Leu Cys
 485 490 495

Val Val Ala Tyr Gly Val Ser Glu Thr Ile Phe Gly Glu Trp Thr Val
 500 505 510

Met Gly Ser Met Ile Ile Phe Ile His Ser Tyr Tyr Asn Val Trp Leu
 515 520 525

Arg Ala Gln Leu Gly Trp Lys Ser Phe Leu Leu Arg Arg Asp Ala Val
 530 535 540

Asn Lys Ile Lys Ser Leu Pro Ile Ala Thr Lys Glu Gln Leu Glu Lys
 545 550 555 560

His Asn Asp Ile Cys Ala Ile Cys Tyr Gln Asp Met Lys Ser Ala Val
 565 570 575

Ile Thr Pro Cys Ser His Phe Phe His Ala Gly Cys Leu Lys Lys Trp
 580 585 590

Leu Tyr Val Gln Glu Thr Cys Pro Leu Cys His Cys His Leu Lys Asn
 595 600 605

Ser Ser Gln Leu Pro Gly Leu Gly Thr Glu Pro Val Leu Gln Pro His
 610 615 620

Ala Gly Ala Glu Gln Asn Val Met Phe Gln Glu Gly Thr Glu Pro Pro
 625 630 635 640

Gly Gln Glu His Thr Pro Gly Thr Arg Ile Gln Glu Gly Ser Arg Asp
 645 650 655

Asn Asn Glu Tyr Ile Ala Arg Arg Pro Asp Asn Gln Glu Gly Ala Phe

660

665

670

Asp Pro Lys Glu Tyr Pro His Ser Ala Lys Asp Glu Ala His Pro Val
 675 680 685

Glu Ser Ala
 690

<210> 2996
 <211> 390
 <212> PRT
 <213> Homo sapiens

<400> 2996

Met Ala Ser Pro Ala Ile Gly Gln Arg Pro Tyr Pro Leu Leu Leu Asp
 1 5 10 15

Pro Glu Pro Pro Arg Tyr Leu Gln Ser Leu Ser Gly Pro Glu Leu Pro
 20 25 30

Pro Pro Pro Pro Asp Arg Ser Ser Arg Leu Cys Val Pro Ala Pro Leu
 35 40 45

Ser Thr Ala Pro Gly Ala Arg Glu Gly Arg Ser Ala Arg Arg Ala Ala
 50 55 60

Arg Gly Asn Leu Glu Pro Pro Pro Arg Ala Ser Arg Pro Ala Arg Pro
 65 70 75 80

Leu Arg Pro Gly Leu Gln Gln Arg Leu Arg Arg Arg Pro Gly Ala Pro
 85 90 95

Arg Pro Arg Asp Val Arg Ser Ile Phe Glu Gln Pro Gln Asp Pro Arg
 100 105 110

Val Pro Ala Glu Arg Gly Glu Gly His Cys Phe Ala Glu Leu Val Leu
 115 120 125

Pro Gly Gly Pro Gly Trp Cys Asp Leu Cys Gly Arg Glu Val Leu Arg
 130 135 140

Gln Ala Leu Arg Cys Thr Asn Cys Lys Phe Thr Cys His Pro Glu Cys
 145 150 155 160

Arg Ser Leu Ile Gln Leu Asp Cys Ser Gln Gln Glu Gly Leu Ser Arg
 165 170 175

Asp Arg Pro Ser Pro Glu Ser Thr Leu Thr Val Thr Phe Ser Gln Asn
 180 185 190

Val Cys Lys Pro Val Glu Glu Thr Gln Arg Pro Pro Thr Leu Gln Glu
 195 200 205

Ile Lys Gln Lys Ile Asp Ser Tyr Asn Thr Arg Glu Lys Asn Cys Leu
 210 215 220

Gly Met Lys Leu Ser Glu Asp Gly Thr Tyr Thr Gly Phe Ile Lys Val
 225 230 235 240

His Leu Lys Leu Arg Arg Pro Val Thr Val Pro Ala Gly Ile Arg Pro
 245 250 255

Gln Ser Ile Tyr Asp Ala Ile Lys Glu Val Asn Leu Ala Ala Thr Thr
 260 265 270

Asp Lys Arg Thr Ser Phe Tyr Leu Pro Leu Asp Ala Ile Lys Gln Leu
 275 280 285

His Ile Ser Ser Thr Thr Thr Val Ser Glu Val Ile Gln Gly Leu Leu
 290 295 300

Lys Lys Phe Met Val Val Asp Asn Pro Gln Lys Phe Ala Leu Phe Lys
 305 310 315 320

Arg Ile His Lys Asp Gly Gln Val Leu Phe Gln Lys Leu Ser Ile Ala
 325 330 335

Asp Arg Pro Leu Tyr Leu Arg Leu Leu Ala Gly Pro Asp Thr Glu Val
 340 345 350

Leu Ser Phe Val Leu Lys Glu Asn Glu Thr Gly Glu Val Glu Trp Asp
 355 360 365

Ala Phe Ser Ile Pro Glu Leu Gln Asn Phe Leu Ser Ser Trp Cys Ile
 370 375 380

Gln Ile Tyr Leu Tyr Tyr
 385 390

<210> 2997
 <211> 297
 <212> PRT
 <213> Homo sapiens

<400> 2997

Met Thr Thr Pro Arg Asn Ser Val Asn Gly Thr Phe Pro Ala Glu Pro
 1 5 10 15

Met Lys Gly Pro Ile Ala Met Gln Ser Gly Pro Lys Pro Leu Phe Arg
 20 25 30

Arg Met Ser Ser Leu Val Gly Pro Thr Gln Ser Phe Phe Met Arg Glu
 35 40 45

Ser Lys Thr Leu Gly Ala Val Gln Ile Met Asn Gly Leu Phe His Ile
 50 55 60

Ala Leu Gly Gly Leu Leu Met Ile Pro Ala Gly Ile Tyr Ala Pro Ile
 65 70 75 80

Cys Val Thr Val Trp Tyr Pro Leu Trp Gly Gly Ile Met Tyr Ile Ile
 85 90 95

Ser Gly Ser Leu Leu Ala Ala Thr Glu Lys Asn Ser Arg Lys Cys Leu
 100 105 110

Val Lys Gly Lys Met Ile Met Asn Ser Leu Ser Leu Phe Ala Ala Ile
 115 120 125

Ser Gly Met Ile Leu Ser Ile Met Asp Ile Leu Asn Ile Lys Ile Ser
 130 135 140

His Phe Leu Lys Met Glu Ser Leu Asn Phe Ile Arg Ala His Thr Pro
 145 150 155 160

Tyr Ile Asn Ile Tyr Asn Cys Glu Pro Ala Asn Pro Ser Glu Lys Asn
 165 170 175

Ser Pro Ser Thr Gln Tyr Cys Tyr Ser Ile Gln Ser Leu Phe Leu Gly
 180 185 190

Ile Leu Ser Val Met Leu Ile Phe Ala Phe Phe Gln Glu Leu Val Ile
 195 200 205

Ala Gly Ile Val Glu Asn Glu Trp Lys Arg Thr Cys Ser Arg Pro Lys
 210 215 220

Ser Asn Ile Val Leu Leu Ser Ala Glu Glu Lys Lys Glu Gln Thr Ile
 225 230 235 240

Glu Ile Lys Glu Glu Val Val Gly Leu Thr Glu Thr Ser Ser Gln Pro
 245 250 255

Lys Asn Glu Glu Asp Ile Glu Ile Ile Pro Ile Gln Glu Glu Glu Glu
 260 265 270

Glu Glu Thr Glu Thr Asn Phe Pro Glu Pro Pro Gln Asp Gln Glu Ser
 275 280 285

Ser Pro Ile Glu Asn Asp Ser Ser Pro
 290 295

<210> 2998

<211> 261

<212> PRT

<213> Homo sapiens

<400> 2998

Met Ser Trp Lys Lys Ala Leu Arg Ile Pro Gly Gly Leu Arg Ala Ala
 1 5 10 15

Thr Val Thr Leu Met Leu Ser Met Leu Ser Thr Pro Val Ala Glu Gly
 20 25 30

Arg Asp Ser Pro Glu Asp Phe Val Tyr Gln Phe Lys Gly Met Cys Tyr
 35 40 45

Phe Thr Asn Gly Thr Glu Arg Val Arg Leu Val Ser Arg Ser Ile Tyr
 50 55 60

Asn Arg Glu Glu Ile Val Arg Phe Asp Ser Asp Val Gly Glu Phe Arg
 65 70 75 80

Ala Val Thr Leu Leu Gly Leu Pro Ala Ala Glu Tyr Trp Asn Ser Gln
 85 90 95

Lys Asp Ile Leu Glu Arg Lys Arg Ala Ala Val Asp Arg Val Cys Arg
 100 105 110

His Asn Tyr Gln Leu Glu Leu Arg Thr Thr Leu Gln Arg Arg Val Glu
 115 120 125

Pro Thr Val Thr Ile Ser Pro Ser Arg Thr Glu Ala Leu Asn His His
 130 135 140

Asn Leu Leu Val Cys Ser Val Thr Asp Phe Tyr Pro Ala Gln Ile Lys
 145 150 155 160

Val Arg Trp Phe Arg Asn Asp Gln Glu Glu Thr Ala Gly Val Val Ser
 165 170 175

Thr Pro Leu Ile Arg Asn Gly Asp Trp Thr Phe Gln Ile Leu Val Met
 180 185 190

Leu Glu Met Thr Pro Gln Arg Gly Asp Val Tyr Thr Cys His Val Glu
 195 200 205

His Pro Ser Leu Gln Ser Pro Ile Thr Val Glu Trp Arg Ala Gln Ser
 210 215 220

Glu Ser Ala Gln Ser Lys Met Leu Ser Gly Ile Gly Gly Phe Val Leu
 225 230 235 240

Gly Leu Ile Phe Leu Gly Leu Gly Leu Ile Ile His His Arg Ser Gln
 245 250 255

Lys Gly Leu Leu His
 260

<210> 2999
 <211> 258
 <212> PRT
 <213> Homo sapiens

<400> 2999

Met Met Val Leu Gln Val Ser Ala Ala Pro Arg Thr Val Ala Leu Thr
 1 5 10 15

Ala Leu Leu Met Val Leu Leu Thr Ser Val Val Gln Gly Arg Ala Thr
 20 25 30

Pro Glu Asn Tyr Leu Phe Gln Gly Arg Gln Glu Cys Tyr Ala Phe Asn
 35 40 45

Gly Thr Gln Arg Phe Leu Glu Arg Tyr Ile Tyr Asn Arg Glu Glu Phe
 50 55 60

Ala Arg Phe Asp Ser Asp Val Gly Glu Phe Arg Ala Val Thr Glu Leu
 65 70 75 80

Gly Arg Pro Ala Ala Glu Tyr Trp Asn Ser Gln Lys Asp Ile Leu Glu
 85 90 95

Glu Lys Arg Ala Val Pro Asp Arg Met Cys Arg His Asn Tyr Glu Leu
 100 105 110

Gly Gly Pro Met Thr Leu Gln Arg Arg Val Gln Pro Arg Val Asn Val
 115 120 125

Ser Pro Ser Lys Lys Gly Pro Leu Gln His His Asn Leu Leu Val Cys
 130 135 140

His Val Thr Asp Phe Tyr Pro Gly Ser Ile Gln Val Arg Trp Phe Leu
 145 150 155 160

Asn Gly Gln Glu Glu Thr Ala Gly Val Val Ser Thr Asn Leu Ile Arg
 165 170 175

Asn Gly Asp Trp Thr Phe Gln Ile Leu Val Met Leu Glu Met Thr Pro
 180 185 190

Gln Gln Gly Asp Val Tyr Thr Cys Gln Val Glu His Thr Ser Leu Asp
 195 200 205

Ser Pro Val Thr Val Glu Trp Lys Ala Gln Ser Asp Ser Ala Arg Ser
 210 215 220

Lys Thr Leu Thr Gly Ala Gly Gly Phe Val Leu Gly Leu Ile Ile Cys
 225 230 235 240

Gly Val Gly Ile Phe Met His Arg Arg Ser Lys Lys Val Gln Arg Gly
 245 250 255

Ser Ala

<210> 3000
 <211> 175
 <212> PRT
 <213> Homo sapiens

<400> 3000

Met Thr Asp Cys Glu Phe Gly Tyr Ile Tyr Arg Leu Ala Gln Asp Tyr
 1 5 10 15

Leu Gln Cys Val Leu Gln Ile Pro Gln Pro Gly Ser Gly Pro Ser Lys
 20 25 30

Thr Ser Arg Val Leu Gln Asn Val Ala Phe Ser Val Gln Lys Glu Val
 35 40 45

Glu Lys Asn Leu Lys Ser Cys Leu Asp Asn Val Asn Val Val Ser Val
 50 55 60

Asp Thr Ala Arg Thr Leu Phe Asn Gln Val Met Glu Lys Glu Phe Glu
 65 70 75 80

Asp Gly Ile Ile Asn Trp Gly Arg Ile Val Thr Ile Phe Ala Phe Glu
 85 90 95

Gly Ile Leu Ile Lys Lys Leu Leu Arg Gln Gln Ile Ala Pro Asp Val
 100 105 110

Asp Thr Tyr Lys Glu Ile Ser Tyr Phe Val Ala Glu Phe Ile Met Asn
 115 120 125

Asn Thr Gly Glu Trp Ile Arg Gln Asn Gly Gly Trp Glu Asn Gly Phe
 130 135 140

Val Lys Lys Phe Glu Pro Lys Ser Gly Trp Met Thr Phe Leu Glu Val
 145 150 155 160

Thr Gly Lys Ile Cys Glu Met Leu Ser Leu Leu Lys Gln Tyr Cys
 165 170 175

<210> 3001
 <211> 825
 <212> PRT
 <213> Homo sapiens

<400> 3001

Met Gly Trp Leu Cys Ser Gly Leu Leu Phe Pro Val Ser Cys Leu Val
 1 5 10 15

Leu Leu Gln Val Ala Ser Ser Gly Asn Met Lys Val Leu Gln Glu Pro
 20 25 30

Thr Cys Val Ser Asp Tyr Met Ser Ile Ser Thr Cys Glu Trp Lys Met
 35 40 45

Asn Gly Pro Thr Asn Cys Ser Thr Glu Leu Arg Leu Leu Tyr Gln Leu
 50 55 60

Val Phe Leu Leu Ser Glu Ala His Thr Cys Ile Pro Glu Asn Asn Gly
 65 70 75 80

Gly Ala Gly Cys Val Cys His Leu Leu Met Asp Asp Val Val Ser Ala
 85 90 95

Asp Asn Tyr Thr Leu Asp Leu Trp Ala Gly Gln Gln Leu Leu Trp Lys
 100 105 110

Gly Ser Phe Lys Pro Ser Glu His Val Lys Pro Arg Ala Pro Gly Asn
 115 120 125

Leu Thr Val His Thr Asn Val Ser Asp Thr Leu Leu Leu Thr Trp Ser
 130 135 140

Asn Pro Tyr Pro Pro Asp Asn Tyr Leu Tyr Asn His Leu Thr Tyr Ala
 145 150 155 160

Val Asn Ile Trp Ser Glu Asn Asp Pro Ala Asp Phe Arg Ile Tyr Asn
 165 170 175

Val Thr Tyr Leu Glu Pro Ser Leu Arg Ile Ala Ala Ser Thr Leu Lys
 180 185 190

Ser Gly Ile Ser Tyr Arg Ala Arg Val Arg Ala Trp Ala Gln Cys Tyr
 195 200 205

Asn Thr Thr Trp Ser Glu Trp Ser Pro Ser Thr Lys Trp His Asn Ser
 210 215 220

Tyr Arg Glu Pro Phe Glu Gln His Leu Leu Leu Gly Val Ser Val Ser
 225 230 235 240

Cys Ile Val Ile Leu Ala Val Cys Leu Leu Cys Tyr Val Ser Ile Thr
 245 250 255

Lys Ile Lys Lys Glu Trp Trp Asp Gln Ile Pro Asn Pro Ala Arg Ser
 260 265 270

Arg Leu Val Ala Ile Ile Ile Gln Asp Ala Gln Gly Ser Gln Trp Glu
 275 280 285

Lys Arg Ser Arg Gly Gln Glu Pro Ala Lys Cys Pro His Trp Lys Asn
 290 295 300

Cys Leu Thr Lys Leu Leu Pro Cys Phe Leu Glu His Asn Met Lys Arg
 305 310 315 320

1425

Asn Ala Gln Ser Ser Ser Gln Thr Pro Lys Ile Val Asn Phe Val Ser

805

810

815

Val Gly Pro Thr Tyr Met Arg Val Ser
820 825

<210> 3002
<211> 285
<212> PRT
<213> Homo sapiens

<400> 3002

Met Asp Asp Ser Thr Glu Arg Glu Gln Ser Arg Leu Thr Ser Cys Leu
1 5 10 15

Lys Lys Arg Glu Glu Met Lys Leu Lys Glu Cys Val Ser Ile Leu Pro
20 25 30

Arg Lys Glu Ser Pro Ser Val Arg Ser Ser Lys Asp Gly Lys Leu Leu
35 40 45

Ala Ala Thr Leu Leu Leu Ala Leu Leu Ser Cys Cys Leu Thr Val Val
50 55 60

Ser Phe Tyr Gln Val Ala Ala Leu Gln Gly Asp Leu Ala Ser Leu Arg
65 70 75 80

Ala Glu Leu Gln Gly His His Ala Glu Lys Leu Pro Ala Gly Ala Gly
85 90 95

Ala Pro Lys Ala Gly Leu Glu Glu Ala Pro Ala Val Thr Ala Gly Leu
100 105 110

Lys Ile Phe Glu Pro Pro Ala Pro Gly Glu Gly Asn Ser Ser Gln Asn
115 120 125

Ser Arg Asn Lys Arg Ala Val Gln Gly Pro Glu Glu Thr Val Thr Gln
130 135 140

Asp Cys Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr Ile Gln Lys
145 150 155 160

Gly Ser Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Ser
165 170 175

Ala Leu Glu Glu Lys Glu Asn Lys Ile Leu Val Lys Glu Thr Gly Tyr
180 185 190

Phe Phe Ile Tyr Gly Gln Val Leu Tyr Thr Asp Lys Thr Tyr Ala Met
 195 200 205

Gly His Leu Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu Leu
 210 215 220

Ser Leu Val Thr Leu Phe Arg Cys Ile Gln Asn Met Pro Glu Thr Leu
 225 230 235 240

Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala Lys Leu Glu Glu Gly
 245 250 255

Asp Glu Leu Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser Leu
 260 265 270

Asp Gly Asp Val Thr Phe Phe Gly Ala Leu Lys Leu Leu
 275 280 285

<210> 3003

<211> 444

<212> PRT

<213> Homo sapiens

<400> 3003

Met Ala Val Thr Thr Arg Leu Thr Arg Leu His Glu Lys Ile Leu Gln
 1 5 10 15

Asn His Phe Gly Gly Lys Arg Leu Ser Leu Leu Tyr Lys Gly Ser Val
 20 25 30

His Gly Phe Arg Asn Gly Val Leu Leu Asp Arg Cys Cys Asn Gln Gly
 35 40 45

Pro Thr Leu Thr Val Ile Tyr Ser Glu Asp His Ile Ile Gly Ala Tyr
 50 55 60

Ala Glu Glu Ser Tyr Gln Glu Gly Lys Tyr Ala Ser Ile Ile Leu Phe
 65 70 75 80

Ala Leu Gln Asp Thr Lys Ile Ser Glu Trp Lys Leu Gly Leu Cys Thr
 85 90 95

Pro Glu Thr Leu Phe Cys Cys Asp Val Thr Lys Tyr Asn Ser Pro Thr
 100 105 110

Asn Phe Gln Ile Asp Gly Arg Asn Arg Lys Val Ile Met Asp Leu Lys

115

120

125

Thr Met Glu Asn Leu Gly Leu Ala Gln Asn Cys Thr Ile Ser Ile Gln
 130 135 140

Asp Tyr Glu Val Phe Arg Cys Glu Asp Ser Leu Asp Glu Arg Lys Ile
 145 150 155 160

Lys Gly Val Ile Glu Leu Arg Lys Ser Leu Leu Ser Ala Leu Arg Thr
 165 170 175

Tyr Glu Pro Tyr Gly Ser Leu Val Gln Gln Ile Arg Ile Leu Leu Leu
 180 185 190

Gly Pro Ile Gly Ala Gly Lys Ser Ser Phe Phe Asn Ser Val Arg Ser
 195 200 205

Val Phe Gln Gly His Val Thr His Gln Ala Leu Val Gly Thr Asn Thr
 210 215 220

Thr Gly Ile Ser Glu Lys Tyr Arg Thr Tyr Ser Ile Arg Asp Gly Lys
 225 230 235 240

Asp Gly Lys Tyr Leu Pro Phe Ile Leu Cys Asp Ser Leu Gly Leu Ser
 245 250 255

Glu Lys Glu Gly Gly Leu Cys Arg Asp Asp Ile Phe Tyr Ile Leu Asn
 260 265 270

Gly Asn Ile Arg Asp Arg Tyr Gln Phe Asn Pro Met Glu Ser Ile Lys
 275 280 285

Leu Asn His His Asp Tyr Ile Asp Ser Pro Ser Leu Lys Asp Arg Ile
 290 295 300

His Cys Val Ala Phe Val Phe Asp Ala Ser Ser Ile Gln Tyr Phe Ser
 305 310 315 320

Ser Gln Met Ile Val Lys Ile Lys Arg Ile Arg Arg Glu Leu Val Asn
 325 330 335

Ala Gly Val Val His Val Ala Leu Leu Thr His Val Asp Ser Met Asp
 340 345 350

Leu Ile Thr Lys Gly Asp Leu Ile Glu Ile Glu Arg Cys Glu Pro Val
 355 360 365

Arg Ser Lys Leu Glu Glu Val Gln Arg Lys Leu Gly Phe Ala Leu Ser
 370 375 380

Asp Ile Ser Val Val Ser Asn Tyr Ser Ser Glu Trp Glu Leu Asp Pro
 385 390 395 400

Val Lys Asp Val Leu Ile Leu Ser Ala Leu Arg Arg Met Leu Trp Ala
 405 410 415

Ala Asp Asp Phe Leu Glu Asp Leu Pro Phe Glu Gln Ile Gly Asn Leu
 420 425 430

Arg Glu Glu Ile Ile Asn Cys Ala Gln Gly Lys Lys
 435 440

<210> 3004
 <211> 432
 <212> PRT
 <213> Homo sapiens

<400> 3004

Met Gly Pro Ala Gly Ser Leu Leu Gly Ser Gly Gln Met Gln Ile Thr
 1 5 10 15

Leu Trp Gly Ser Leu Ala Ala Val Ala Ile Phe Phe Val Ile Thr Phe
 20 25 30

Leu Ile Phe Pro Cys Ser Ser Cys Asp Arg Glu Lys Lys Pro Arg Gln
 35 40 45

His Ser Gly Asp His Glu Asn Leu Met Asn Val Pro Ser Asp Lys Glu
 50 55 60

Met Phe Ser Arg Ser Val Thr Ser Leu Ala Thr Asp Ala Pro Ala Ser
 65 70 75 80

Ser Glu Gln Asn Gly Ala Leu Thr Asn Gly Asp Ile Leu Ser Glu Asp
 85 90 95

Ser Thr Leu Thr Cys Met Gln His Tyr Glu Glu Val Gln Thr Ser Ala
 100 105 110

Ser Asp Leu Leu Asp Ser Gln Asp Ser Thr Gly Lys Pro Lys Cys His
 115 120 125

Gln Ser Arg Glu Leu Pro Arg Ile Pro Pro Glu Ser Ala Val Asp Thr
 130 135 140

Met Leu Thr Ala Arg Ser Val Asp Gly Asp Gln Gly Leu Gly Met Glu
 145 150 155 160

Gly Pro Tyr Glu Val Leu Lys Asp Ser Ser Ser Gln Glu Asn Met Val
 165 170 175

Glu Asp Cys Leu Tyr Glu Thr Val Lys Glu Ile Lys Glu Val Ala Ala
 180 185 190

Ala Ala His Leu Glu Lys Gly His Ser Gly Lys Ala Lys Ser Thr Ser
 195 200 205

Ala Ser Lys Glu Leu Pro Gly Pro Gln Thr Glu Gly Lys Ala Glu Phe
 210 215 220

Ala Glu Tyr Ala Ser Val Asp Arg Asn Lys Lys Cys Arg Gln Ser Val
 225 230 235 240

Asn Val Glu Ser Ile Leu Gly Asn Ser Cys Asp Pro Glu Glu Glu Ala
 245 250 255

Pro Pro Pro Val Pro Val Lys Leu Leu Asp Glu Asn Glu Asn Leu Gln
 260 265 270

Glu Lys Glu Gly Gly Glu Ala Glu Glu Ser Ala Thr Asp Thr Thr Ser
 275 280 285

Glu Thr Asn Lys Arg Phe Ser Ser Leu Ser Tyr Lys Ser Arg Glu Glu
 290 295 300

Asp Pro Thr Leu Thr Glu Glu Glu Ile Ser Ala Met Tyr Ser Ser Val
 305 310 315 320

Asn Lys Pro Gly Gln Leu Val Asn Lys Ser Gly Gln Ser Leu Thr Val
 325 330 335

Pro Glu Ser Thr Tyr Thr Ser Ile Gln Gly Asp Pro Gln Arg Ser Pro
 340 345 350

Ser Ser Cys Asn Asp Leu Tyr Ala Thr Val Lys Asp Phe Glu Lys Thr
 355 360 365

Pro Asn Ser Thr Leu Pro Pro Ala Gly Arg Pro Ser Glu Glu Pro Glu

370

375

380

Pro Asp Tyr Glu Ala Ile Gln Thr Leu Asn Arg Glu Glu Glu Lys Ala
 385 390 395 400

Thr Leu Gly Thr Asn Gly His His Gly Leu Val Pro Lys Glu Asn Asp
 405 410 415

Tyr Glu Ser Ile Ser Asp Leu Gln Gln Gly Arg Asp Ile Thr Arg Leu
 420 425 430

<210> 3005

<211> 501

<212> PRT

<213> Homo sapiens

<400> 3005

Met Ile Ile Ser His Phe Pro Lys Cys Val Ala Val Phe Ala Leu Leu
 1 5 10 15

Ala Leu Ser Val Gly Ala Leu Asp Thr Phe Ile Ala Ala Val Tyr Glu
 20 25 30

His Ala Val Ile Leu Pro Asn Arg Thr Glu Thr Pro Val Ser Lys Glu
 35 40 45

Glu Ala Leu Leu Leu Met Asn Lys Asn Ile Asp Val Leu Glu Lys Ala
 50 55 60

Val Lys Leu Ala Ala Lys Gln Gly Ala His Ile Ile Val Thr Pro Glu
 65 70 75 80

Asp Gly Ile Tyr Gly Trp Ile Phe Thr Arg Glu Ser Ile Tyr Pro Tyr
 85 90 95

Leu Glu Asp Ile Pro Asp Pro Gly Val Asn Trp Ile Pro Cys Arg Asp
 100 105 110

Pro Trp Arg Phe Gly Asn Thr Pro Val Gln Gln Arg Leu Ser Cys Leu
 115 120 125

Ala Lys Asp Asn Ser Ile Tyr Val Val Ala Asn Ile Gly Asp Lys Lys
 130 135 140

Pro Cys Asn Ala Ser Asp Ser Gln Cys Pro Pro Asp Gly Arg Tyr Gln
 145 150 155 160

Tyr Asn Thr Asp Val Val Phe Asp Ser Gln Gly Lys Leu Leu Ala Arg
 165 170 175

Tyr His Lys Tyr Asn Leu Phe Ala Pro Glu Ile Gln Phe Asp Phe Pro
 180 185 190

Lys Asp Ser Glu Leu Val Thr Phe Asp Thr Pro Phe Gly Lys Phe Gly
 195 200 205

Ile Phe Thr Cys Phe Asp Ile Phe Ser His Asp Pro Ala Ala Val Val
 210 215 220

Val Asp Glu Val Ser Ile Asp Ser Ile Leu Tyr Pro Thr Ala Trp Tyr
 225 230 235 240

Asn Thr Leu Pro Leu Leu Ser Ala Val Pro Phe His Ser Ala Trp Ala
 245 250 255

Lys Ala Met Gly Val Asn Leu Leu Ala Ala Asn Thr His Asn Thr Ser
 260 265 270

Met His Met Thr Gly Ser Gly Ile Tyr Ala Pro Glu Ala Val Lys Val
 275 280 285

Tyr His Tyr Asp Met Glu Thr Glu Ser Gly Gln Leu Leu Leu Ser Glu
 290 295 300

Leu Lys Ser Arg Pro Arg Arg Glu Pro Thr Tyr Pro Ala Ala Val Asp
 305 310 315 320

Trp His Ala Tyr Ala Ser Ser Val Lys Pro Phe Ser Ser Glu Gln Ser
 325 330 335

Asp Phe Leu Gly Met Ile Tyr Phe Asp Glu Phe Thr Phe Thr Lys Leu
 340 345 350

Lys Arg Asn Thr Gly Asn Tyr Thr Ala Cys Gln Lys Asp Leu Cys Cys
 355 360 365

His Leu Thr Tyr Lys Met Ser Glu Lys Arg Thr Asp Glu Ile Tyr Ala
 370 375 380

Leu Gly Ala Phe Asp Gly Leu His Thr Val Glu Gly Gln Tyr Tyr Leu
 385 390 395 400

Gln Ile Cys Ala Leu Leu Lys Cys Gln Thr Thr Asp Leu Glu Thr Cys
 405 410 415

Gly Glu Pro Val Gly Ser Ala Phe Thr Lys Phe Glu Asp Phe Ser Leu
 420 425 430

Ser Gly Thr Phe Gly Thr Arg Tyr Val Phe Pro Gln Ile Ile Leu Ser
 435 440 445

Gly Ser Gln Leu Ala Pro Glu Arg His Tyr Glu Ile Ser Arg Asp Gly
 450 455 460

Arg Leu Arg Ser Arg Ser Gly Ala Pro Leu Pro Val Leu Val Met Ala
 465 470 475 480

Leu Tyr Gly Arg Val Phe Glu Lys Asp Pro Pro Arg Leu Gly Gln Gly
 485 490 495

Ser Gly Lys Phe Gln
 500

<210> 3006
 <211> 329
 <212> PRT
 <213> Homo sapiens

<400> 3006

Met Trp Gly Leu Lys Val Leu Leu Leu Pro Val Val Ser Phe Ala Leu
 1 5 10 15

Tyr Pro Glu Glu Ile Leu Asp Thr His Trp Glu Leu Trp Lys Lys Thr
 20 25 30

His Arg Lys Gln Tyr Asn Asn Lys Val Asp Glu Ile Ser Arg Arg Leu
 35 40 45

Ile Trp Glu Lys Asn Leu Lys Tyr Ile Ser Ile His Asn Leu Glu Ala
 50 55 60

Ser Leu Gly Val His Thr Tyr Glu Leu Ala Met Asn His Leu Gly Asp
 65 70 75 80

Met Thr Ser Glu Glu Val Val Gln Lys Met Thr Gly Leu Lys Val Pro
 85 90 95

Leu Ser His Ser Arg Ser Asn Asp Thr Leu Tyr Ile Pro Glu Trp Glu
 100 105 110

Gly Arg Ala Pro Asp Ser Val Asp Tyr Arg Lys Lys Gly Tyr Val Thr
 115 120 125

Pro Val Lys Asn Gln Gly Gln Cys Gly Ser Cys Trp Ala Phe Ser Ser
 130 135 140

Val Gly Ala Leu Glu Gly Gln Leu Lys Lys Lys Thr Gly Lys Leu Leu
 145 150 155 160

Asn Leu Ser Pro Gln Asn Leu Val Asp Cys Val Ser Glu Asn Asp Gly
 165 170 175

Cys Gly Gly Gly Tyr Met Thr Asn Ala Phe Gln Tyr Val Gln Lys Asn
 180 185 190

Arg Gly Ile Asp Ser Glu Asp Ala Tyr Pro Tyr Val Gly Gln Glu Glu
 195 200 205

Ser Cys Met Tyr Asn Pro Thr Gly Lys Ala Ala Lys Cys Arg Gly Tyr
 210 215 220

Arg Glu Ile Pro Glu Gly Asn Glu Lys Ala Leu Lys Arg Ala Val Ala
 225 230 235 240

Arg Val Gly Pro Val Ser Val Ala Ile Asp Ala Ser Leu Thr Ser Phe
 245 250 255

Gln Phe Tyr Ser Lys Gly Val Tyr Tyr Asp Glu Ser Cys Asn Ser Asp
 260 265 270

Asn Leu Asn His Ala Val Leu Ala Val Gly Tyr Gly Ile Gln Lys Gly
 275 280 285

Asn Lys His Trp Ile Ile Lys Asn Ser Trp Gly Glu Asn Trp Gly Asn
 290 295 300

Lys Gly Tyr Ile Leu Met Ala Arg Asn Lys Asn Asn Ala Cys Gly Ile
 305 310 315 320

Ala Asn Leu Ala Ser Phe Pro Lys Met
 325

<210> 3007
 <211> 1170
 <212> PRT

<213> Homo sapiens

<400> 3007

Met Lys Asp Ser Cys Ile Thr Val Met Ala Met Ala Leu Leu Ser Gly
 1 5 10 15

Phe Phe Phe Phe Ala Pro Ala Ser Ser Tyr Asn Leu Asp Val Arg Gly
 20 25 30

Ala Arg Ser Phe Ser Pro Pro Arg Ala Gly Arg His Phe Gly Tyr Arg
 35 40 45

Val Leu Gln Val Gly Asn Gly Val Ile Val Gly Ala Pro Gly Glu Gly
 50 55 60

Asn Ser Thr Gly Ser Leu Tyr Gln Cys Gln Ser Gly Thr Gly His Cys
 65 70 75 80

Leu Pro Val Thr Leu Arg Gly Ser Asn Tyr Thr Ser Lys Tyr Leu Gly
 85 90 95

Met Thr Leu Ala Thr Asp Pro Thr Asp Gly Ser Ile Leu Ala Cys Asp
 100 105 110

Pro Gly Leu Ser Arg Thr Cys Asp Gln Asn Thr Tyr Leu Ser Gly Leu
 115 120 125

Cys Tyr Leu Phe Arg Gln Asn Leu Gln Gly Pro Met Leu Gln Gly Arg
 130 135 140

Pro Gly Phe Gln Glu Cys Ile Lys Gly Asn Val Asp Leu Val Phe Leu
 145 150 155 160

Phe Asp Gly Ser Met Ser Leu Gln Pro Asp Glu Phe Gln Lys Ile Leu
 165 170 175

Asp Phe Met Lys Asp Val Met Lys Lys Leu Ser Asn Thr Ser Tyr Gln
 180 185 190

Phe Ala Ala Val Gln Phe Ser Thr Ser Tyr Lys Thr Glu Phe Asp Phe
 195 200 205

Ser Asp Tyr Val Lys Trp Lys Asp Pro Asp Ala Leu Leu Lys His Val
 210 215 220

Lys His Met Leu Leu Leu Thr Asn Thr Phe Gly Ala Ile Asn Tyr Val

225 230 235 240

Ala Thr Glu Val Phe Arg Glu Glu Leu Gly Ala Arg Pro Asp Ala Thr
 245 250 255

Lys Val Leu Ile Ile Ile Thr Asp Gly Glu Ala Thr Asp Ser Gly Asn
 260 265 270

Ile Asp Ala Ala Lys Asp Ile Ile Arg Tyr Ile Ile Gly Ile Gly Lys
 275 280 285

His Phe Gln Thr Lys Glu Ser Gln Glu Thr Leu His Lys Phe Ala Ser
 290 295 300

Lys Pro Ala Ser Glu Phe Val Lys Ile Leu Asp Thr Phe Glu Lys Leu
305 310 315 320

Lys Asp Leu Phe Thr Glu Leu Gln Lys Lys Ile Tyr Val Ile Glu Gly
 325 330 335

Thr Ser Lys Gln Asp Leu Thr Ser Phe Asn Met Glu Leu Ser Ser Ser
 340 345 350

Gly Ile Ser Ala Asp Leu Ser Arg Gly His Ala Val Val Gly Ala Val
 355 360 365

Gly Ala Lys Asp Trp Ala Gly Gly Phe Leu Asp Leu Lys Ala Asp Leu
 370 375 380

Gln Asp Asp Thr Phe Ile Gly Asn Glu Pro Leu Thr Pro Glu Val Arg
385 390 395 400

ala Gly Tyr Leu Gly Tyr Thr Val Thr Trp Leu Pro Ser Arg Gln Lys
 405 410 415

thr Ser Leu Leu Ala Ser Gly Ala Pro Arg Tyr Gln His Met Gly Arg
 420 425 430

al Leu Leu Phe Gln Glu Pro Gln Gly Gly Gly His Trp Ser Gln Val
 435 440 445

ln Thr Ile His Gly Thr Gln Ile Gly Ser Tyr Phe Gly Gly Glu Leu
 450 455 460

ys Gly Val Asp Val Asp Gln Asp Gly Glu Thr Glu Leu Leu Leu Ile
55 470 475 480

Gly Ala Pro Leu Phe Tyr Gly Glu Gln Arg Gly Gly Arg Val Phe Ile
 485 490 495

Tyr Gln Arg Arg Gln Leu Gly Phe Glu Glu Val Ser Glu Leu Gln Gly
 500 505 510

Asp Pro Gly Tyr Pro Leu Gly Arg Phe Gly Glu Ala Ile Thr Ala Leu
 515 520 525

Thr Asp Ile Asn Gly Asp Gly Leu Val Asp Val Ala Val Gly Ala Pro
 530 535 540

Leu Glu Glu Gln Gly Ala Val Tyr Ile Phe Asn Gly Arg His Gly Gly
 545 550 555 560

Leu Ser Pro Gln Pro Ser Gln Arg Ile Glu Gly Thr Gln Val Leu Ser
 565 570 575

Gly Ile Gln Trp Phe Gly Arg Ser Ile His Gly Val Lys Asp Leu Glu
 580 585 590

Gly Asp Gly Leu Ala Asp Val Ala Val Gly Ala Glu Ser Gln Met Ile
 595 600 605

Val Leu Ser Ser Arg Pro Val Val Asp Met Val Thr Leu Met Ser Phe
 610 615 620

Ser Pro Ala Glu Ile Pro Val His Glu Val Glu Cys Ser Tyr Ser Thr
 625 630 635 640

Ser Asn Lys Met Lys Glu Gly Val Asn Ile Thr Ile Cys Phe Gln Ile
 645 650 655

Lys Ser Leu Tyr Pro Gln Phe Gln Gly Arg Leu Val Ala Asn Leu Thr
 660 665 670

Tyr Thr Leu Gln Leu Asp Gly His Arg Thr Arg Arg Arg Gly Leu Phe
 675 680 685

Pro Gly Gly Arg His Glu Leu Arg Arg Asn Ile Ala Val Thr Thr Ser
 690 695 700

Met Ser Cys Thr Asp Phe Ser Phe His Phe Pro Val Cys Val Gln Asp
 705 710 715 720

Leu Ile Ser Pro Ile Asn Val Ser Leu Asn Phe Ser Leu Trp Glu Glu
 725 730 735

Glu Gly Thr Pro Arg Asp Gln Arg Ala Gln Gly Lys Asp Ile Pro Pro
 740 745 750

Ile Leu Arg Pro Ser Leu His Ser Glu Thr Trp Glu Ile Pro Phe Glu
 755 760 765

Lys Asn Cys Gly Glu Asp Lys Lys Cys Glu Ala Asn Leu Arg Val Ser
 770 775 780

Phe Ser Pro Ala Arg Ser Arg Ala Leu Arg Leu Thr Ala Phe Ala Ser
 785 790 795 800

Leu Ser Val Glu Leu Ser Leu Ser Asn Leu Glu Glu Asp Ala Tyr Trp
 805 810 815

Val Gln Leu Asp Leu His Phe Pro Pro Gly Leu Ser Phe Arg Lys Val
 820 825 830

Glu Met Leu Lys Pro His Ser Gln Ile Pro Val Ser Cys Glu Glu Leu
 835 840 845

Pro Glu Glu Ser Arg Leu Leu Ser Arg Ala Leu Ser Cys Asn Val Ser
 850 855 860

Ser Pro Ile Phe Lys Ala Gly His Ser Val Ala Leu Gln Met Met Phe
 865 870 875 880

Asn Thr Leu Val Asn Ser Ser Trp Gly Asp Ser Val Glu Leu His Ala
 885 890 895

Asn Val Thr Cys Asn Asn Glu Asp Ser Asp Leu Leu Glu Asp Asn Ser
 900 905 910

Ala Thr Thr Ile Ile Pro Ile Leu Tyr Pro Ile Asn Ile Leu Ile Gln
 915 920 925

Asp Gln Glu Asp Ser Thr Leu Tyr Val Ser Phe Thr Pro Lys Gly Pro
 930 935 940

Lys Ile His Gln Val Lys His Met Tyr Gln Val Arg Ile Gln Pro Ser
 945 950 955 960

Ile His Asp His Asn Ile Pro Thr Leu Glu Ala Val Val Gly Val Pro
 965 970 975

Gln Pro Pro Ser Glu Gly Pro Ile Thr His Gln Trp Ser Val Gln Met
 980 985 990

Glu Pro Pro Val Pro Cys His Tyr Glu Asp Leu Glu Arg Leu Pro Asp
 995 1000 1005

Ala Ala Glu Pro Cys Leu Pro Gly Ala Leu Phe Arg Cys Pro Val
 1010 1015 1020

Val Phe Arg Gln Glu Ile Leu Val Gln Val Ile Gly Thr Leu Glu
 1025 1030 1035

Leu Val Gly Glu Ile Glu Ala Ser Ser Met Phe Ser Leu Cys Ser
 1040 1045 1050

Ser Leu Ser Ile Ser Phe Asn Ser Ser Lys His Phe His Leu Tyr
 1055 1060 1065

Gly Ser Asn Ala Ser Leu Ala Gln Val Val Met Lys Val Asp Val
 1070 1075 1080

Val Tyr Glu Lys Gln Met Leu Tyr Leu Tyr Val Leu Ser Gly Ile
 1085 1090 1095

Gly Gly Leu Leu Leu Leu Leu Leu Ile Phe Ile Val Leu Tyr Lys
 1100 1105 1110

Val Gly Phe Phe Lys Arg Asn Leu Lys Glu Lys Met Glu Ala Gly
 1115 1120 1125

Arg Gly Val Pro Asn Gly Ile Pro Ala Glu Asp Ser Glu Gln Leu
 1130 1135 1140

Ala Ser Gly Gln Glu Ala Gly Asp Pro Gly Cys Leu Lys Pro Leu
 1145 1150 1155

His Glu Lys Asp Ser Glu Ser Gly Gly Gly Lys Asp
 1160 1165 1170

<210> 3008
 <211> 502
 <212> PRT
 <213> Homo sapiens

<400> 3008

Met Ala Thr Asn Pro Gln Pro Gln Pro Pro Pro Pro Ala Pro Pro Pro
 1 5 10 15
 Pro Pro Pro Gln Pro Gln Pro Gln Pro Pro Pro Pro Pro Gly Pro
 20 25 30
 Gly Ala Gly Pro Gly Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly Ala
 35 40 45
 Gly Asp Pro Gln Leu Val Ala Met Ile Val Asn His Leu Lys Ser Gln
 50 55 60
 Gly Leu Phe Asp Gln Phe Arg Arg Asp Cys Leu Ala Asp Val Asp Thr
 65 70 75 80
 Lys Pro Ala Tyr Gln Asn Leu Arg Gln Arg Val Asp Asn Phe Val Ala
 85 90 95
 Asn His Leu Ala Thr His Thr Trp Ser Pro His Leu Asn Lys Asn Gln
 100 105 110
 Leu Arg Asn Asn Ile Arg Gln Gln Val Leu Lys Ser Gly Met Leu Glu
 115 120 125
 Ser Gly Ile Asp Arg Ile Ile Ser Gln Val Val Asp Pro Lys Ile Asn
 130 135 140
 His Thr Phe Arg Pro Gln Val Glu Lys Ala Val His Glu Phe Leu Ala
 145 150 155 160
 Thr Leu Asn His Lys Glu Glu Gly Ser Gly Asn Thr Ala Pro Asp Asp
 165 170 175
 Glu Lys Pro Asp Thr Ser Leu Ile Thr Gln Gly Val Pro Thr Pro Gly
 180 185 190
 Pro Ser Ala Asn Val Ala Asn Asp Ala Met Ser Ile Leu Glu Thr Ile
 195 200 205
 Thr Ser Leu Asn Gln Glu Ala Ser Ala Ala Arg Ala Ser Thr Glu Thr
 210 215 220
 Ser Asn Ala Lys Thr Ser Glu Arg Ala Ser Lys Lys Leu Pro Ser Gln
 225 230 235 240

Pro Thr Thr Asp Thr Ser Thr Asp Lys Glu Arg Thr Ser Glu Asp Met
245 250 255

Ala Asp Lys Glu Lys Ser Thr Ala Asp Ser Gly Gly Glu Gly Leu Glu
260 265 270

Thr Ala Pro Lys Ser Glu Glu Phe Ser Asp Leu Pro Cys Pro Val Glu
275 280 285

Glu Ile Lys Asn Tyr Thr Lys Glu His Asn Asn Leu Ile Leu Leu Asn
290 295 300

Lys Asp Val Gln Gln Glu Ser Ser Glu Gln Lys Asn Lys Ser Thr Asp
305 310 315 320

Lys Gly Glu Lys Lys Pro Asp Ser Asn Glu Lys Gly Glu Arg Lys Lys
325 330 335

Glu Lys Lys Glu Lys Thr Glu Lys Lys Phe Asp His Ser Lys Lys Ser
340 345 350

Glu Asp Thr Gln Lys Val Lys Asp Glu Lys Gln Ala Lys Glu Lys Glu
355 360 365

Val Glu Ser Leu Lys Leu Pro Ser Glu Lys Asn Ser Asn Lys Ala Lys
370 375 380

Thr Val Glu Gly Thr Lys Glu Asp Phe Ser Leu Ile Asp Ser Asp Val
385 390 395 400

Asp Gly Leu Thr Asp Ile Thr Val Ser Ser Val His Thr Ser Asp Leu
405 410 415

Ser Ser Phe Glu Glu Asp Thr Glu Glu Glu Val Val Thr Ser Asp Ser
420 425 430

Met Glu Glu Gly Glu Ile Thr Ser Asp Asp Glu Glu Lys Asn Lys Gln
435 440 445

Asn Lys Thr Lys Thr Gln Thr Ser Asp Ser Ser Glu Gly Lys Thr Lys
450 455 460

Ser Val Arg His Ala Tyr Val His Lys Pro Tyr Leu Tyr Ser Lys Tyr
465 470 475 480

1443

Asp Ala Val Ala Asn Trp Tyr Phe Gly Asn Phe Leu Cys Lys Ala Val
 100 105 110

His Val Ile Tyr Thr Val Asn Leu Tyr Ser Ser Val Leu Ile Leu Ala
 115 120 125

Phe Ile Ser Leu Asp Arg Tyr Leu Ala Ile Val His Ala Thr Asn Ser
 130 135 140

Gln Arg Pro Arg Lys Leu Leu Ala Glu Lys Val Val Tyr Val Gly Val
 145 150 155 160

Trp Ile Pro Ala Leu Leu Leu Thr Ile Pro Asp Phe Ile Phe Ala Asn
 165 170 175

Val Ser Glu Ala Asp Asp Arg Tyr Ile Cys Asp Arg Phe Tyr Pro Asn
 180 185 190

Asp Leu Trp Val Val Val Phe Gln Phe Gln His Ile Met Val Gly Leu
 195 200 205

Ile Leu Pro Gly Ile Val Ile Leu Ser Cys Tyr Cys Ile Ile Ile Ser
 210 215 220

Lys Leu Ser His Ser Lys Gly His Gln Lys Arg Lys Ala Leu Lys Thr
 225 230 235 240

Thr Val Ile Leu Ile Leu Ala Phe Phe Ala Cys Trp Leu Pro Tyr Tyr
 245 250 255

Ile Gly Ile Ser Ile Asp Ser Phe Ile Leu Leu Glu Ile Ile Lys Gln
 260 265 270

Gly Cys Glu Phe Glu Asn Thr Val His Lys Trp Ile Ser Ile Thr Glu
 275 280 285

Ala Leu Ala Phe Phe His Cys Cys Leu Asn Pro Ile Leu Tyr Ala Phe
 290 295 300

Leu Gly Ala Lys Phe Lys Thr Ser Ala Gln His Ala Leu Thr Ser Val
 305 310 315 320

Ser Arg Gly Ser Ser Leu Lys Ile Leu Ser Lys Gly Lys Arg Gly Gly
 325 330 335

His Ser Ser Val Ser Thr Glu Ser Glu Ser Ser Ser Phe His Ser Ser
 340 345 350

<210> 3011
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 3011

Met Ala Pro Leu Lys Met Leu Ala Leu Val Thr Leu Leu Leu Gly Ala
 1 5 10 15

Ser Leu Gln His Ile His Ala Ala Arg Gly Thr Asn Val Gly Arg Glu
 20 25 30

Cys Cys Leu Glu Tyr Phe Lys Gly Ala Ile Pro Leu Arg Lys Leu Lys
 35 40 45

Thr Trp Tyr Gln Thr Ser Glu Asp Cys Ser Arg Asp Ala Ile Val Phe
 50 55 60

Val Thr Val Gln Gly Arg Ala Ile Cys Ser Asp Pro Asn Asn Lys Arg
 65 70 75 80

Val Lys Asn Ala Val Lys Tyr Leu Gln Ser Leu Glu Arg Ser
 85 90

<210> 3012
 <211> 748
 <212> PRT
 <213> Homo sapiens

<400> 3012

Met Ser Gln Trp Asn Gln Val Gln Gln Leu Glu Ile Lys Phe Leu Glu
 1 5 10 15

Gln Val Asp Gln Phe Tyr Asp Asp Asn Phe Pro Met Glu Ile Arg His
 20 25 30

Leu Leu Ala Gln Trp Ile Glu Asn Gln Asp Trp Glu Ala Ala Ser Asn
 35 40 45

Asn Glu Thr Met Ala Thr Ile Leu Leu Gln Asn Leu Leu Ile Gln Leu
 50 55 60

Asp Glu Gln Leu Gly Arg Val Ser Lys Glu Lys Asn Leu Leu Leu Ile
 65 70 75 80

His Asn Leu Lys Arg Ile Arg Lys Val Leu Gln Gly Lys Phe His Gly
 85 90 95

Asn Pro Met His Val Ala Val Val Ile Ser Asn Cys Leu Arg Glu Glu
 100 105 110

Arg Arg Ile Leu Ala Ala Ala Asn Met Pro Val Gln Gly Pro Leu Glu
 115 120 125

Lys Ser Leu Gln Ser Ser Ser Val Ser Glu Arg Gln Arg Asn Val Glu
 130 135 140

His Lys Val Ala Ala Ile Lys Asn Ser Val Gln Met Thr Glu Gln Asp
 145 150 155 160

Thr Lys Tyr Leu Glu Asp Leu Gln Asp Glu Phe Asp Tyr Arg Tyr Lys
 165 170 175

Thr Ile Gln Thr Met Asp Gln Ser Asp Lys Asn Ser Ala Met Val Asn
 180 185 190

Gln Glu Val Leu Thr Leu Gln Glu Met Leu Asn Ser Leu Asp Phe Lys
 195 200 205

Arg Lys Glu Ala Leu Ser Lys Met Thr Gln Ile Ile His Glu Thr Asp
 210 215 220

Leu Leu Met Asn Thr Met Leu Ile Glu Glu Leu Gln Asp Trp Lys Arg
 225 230 235 240

Arg Gln Gln Ile Ala Cys Ile Gly Gly Pro Leu His Asn Gly Leu Asp
 245 250 255

Gln Leu Gln Asn Cys Phe Thr Leu Leu Ala Glu Ser Leu Phe Gln Leu
 260 265 270

Arg Arg Gln Leu Glu Lys Leu Glu Glu Gln Ser Thr Lys Met Thr Tyr
 275 280 285

Glu Gly Asp Pro Ile Pro Met Gln Arg Thr His Met Leu Glu Arg Val
 290 295 300

Thr Phe Leu Ile Tyr Asn Leu Phe Lys Asn Ser Phe Val Val Glu Arg
 305 310 315 320

Gln Pro Cys Met Pro Thr His Pro Gln Arg Pro Leu Val Leu Lys Thr
 325 330 335

Leu Ile Gln Phe Thr Val Lys Leu Arg Leu Leu Ile Lys Leu Pro Glu
 340 345 350

Leu Asn Tyr Gln Val Lys Val Lys Ala Ser Ile Asp Lys Asn Val Ser
 355 360 365

Thr Leu Ser Asn Arg Arg Phe Val Leu Cys Gly Thr Asn Val Lys Ala
 370 375 380

Met Ser Ile Glu Glu Ser Ser Asn Gly Ser Leu Ser Val Glu Phe Arg
 385 390 395 400

His Leu Gln Pro Lys Glu Met Lys Ser Ser Ala Gly Gly Lys Gly Asn
 405 410 415

Glu Gly Cys His Met Val Thr Glu Glu Leu His Ser Ile Thr Phe Glu
 420 425 430

Thr Gln Ile Cys Leu Tyr Gly Leu Thr Ile Asp Leu Glu Thr Ser Ser
 435 440 445

Leu Pro Val Val Met Ile Ser Asn Val Ser Gln Leu Pro Asn Ala Trp
 450 455 460

Ala Ser Ile Ile Trp Tyr Asn Val Ser Thr Asn Asp Ser Gln Asn Leu
 465 470 475 480

Val Phe Phe Asn Asn Pro Pro Pro Ala Thr Leu Ser Gln Leu Leu Glu
 485 490 495

Val Met Ser Trp Gln Phe Ser Ser Tyr Val Gly Arg Gly Leu Asn Ser
 500 505 510

Asp Gln Leu His Met Leu Ala Glu Lys Leu Thr Val Gln Ser Ser Tyr
 515 520 525

Ser Asp Gly His Leu Thr Trp Ala Lys Phe Cys Lys Glu His Leu Pro
 530 535 540

Gly Lys Ser Phe Thr Phe Trp Thr Trp Leu Glu Ala Ile Leu Asp Leu
 545 550 555 560

Ile Lys Lys His Ile Leu Pro Leu Trp Ile Asp Gly Tyr Val Met Gly

565

570

575

Phe Val Ser Lys Glu Lys Glu Arg Leu Leu Leu Lys Asp Lys Met Pro
 580 585 590

Gly Thr Phe Leu Leu Arg Phe Ser Glu Ser His Leu Gly Gly Ile Thr
 595 600 605

Phe Thr Trp Val Asp His Ser Glu Ser Gly Glu Val Arg Phe His Ser
 610 615 620

Val Glu Pro Tyr Asn Lys Gly Arg Leu Ser Ala Leu Pro Phe Ala Asp
 625 630 635 640

Ile Leu Arg Asp Tyr Lys Val Ile Met Ala Glu Asn Ile Pro Glu Asn
 645 650 655

Pro Leu Lys Tyr Leu Tyr Pro Asp Ile Pro Lys Asp Lys Ala Phe Gly
 660 665 670

Lys His Tyr Ser Ser Gln Pro Cys Glu Val Ser Arg Pro Thr Glu Arg
 675 680 685

Gly Asp Lys Gly Tyr Val Pro Ser Val Phe Ile Pro Ile Ser Thr Ile
 690 695 700

Arg Ser Asp Ser Thr Glu Pro His Ser Pro Ser Asp Leu Leu Pro Met
 705 710 715 720

Ser Pro Ser Val Tyr Ala Val Leu Arg Glu Asn Leu Ser Pro Thr Thr
 725 730 735

Ile Glu Thr Ala Met Lys Ser Pro Tyr Ser Ala Glu
 740 745

<210> 3013

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3013

Met Lys Leu Cys Val Thr Val Leu Ser Leu Leu Met Leu Val Ala Ala
 1 5 10 15

Phe Cys Ser Pro Ala Leu Ser Ala Pro Met Gly Ser Asp Pro Pro Thr
 20 25 30

Ala Cys Cys Phe Ser Tyr Thr Ala Arg Lys Leu Pro Arg Asn Phe Val
 35 40 45

Val Asp Tyr Tyr Glu Thr Ser Ser Leu Cys Ser Gln Pro Ala Val Val
 50 55 60

Phe Gln Thr Lys Arg Ser Lys Gln Val Cys Ala Asp Pro Ser Glu Ser
 65 70 75 80

Trp Val Gln Glu Tyr Val Tyr Asp Leu Glu Leu Asn
 85 90

<210> 3014

<211> 444

<212> PRT

<213> Homo sapiens

<400> 3014

Met Val Ser Gln Ala Leu Arg Leu Leu Cys Leu Leu Leu Gly Leu Gln
 1 5 10 15

Gly Cys Leu Ala Ala Val Phe Val Thr Gln Glu Glu Ala His Gly Val
 20 25 30

Leu His Arg Arg Arg Arg Ala Asn Ala Phe Leu Glu Glu Leu Arg Pro
 35 40 45

Gly Ser Leu Glu Arg Glu Cys Lys Glu Glu Gln Cys Ser Phe Glu Glu
 50 55 60

Ala Arg Glu Ile Phe Lys Asp Ala Glu Arg Thr Lys Leu Phe Trp Ile
 65 70 75 80

Ser Tyr Ser Asp Gly Asp Gln Cys Ala Ser Ser Pro Cys Gln Asn Gly
 85 90 95

Gly Ser Cys Lys Asp Gln Leu Gln Ser Tyr Ile Cys Phe Cys Leu Pro
 100 105 110

Ala Phe Glu Gly Arg Asn Cys Glu Thr His Lys Asp Asp Gln Leu Ile
 115 120 125

Cys Val Asn Glu Asn Gly Gly Cys Glu Gln Tyr Cys Ser Asp His Thr
 130 135 140

Gly Thr Lys Arg Ser Cys Arg Cys His Glu Gly Tyr Ser Leu Leu Ala

145		150		155		160
Asp Gly Val Ser Cys Thr Pro Thr Val Glu Tyr Pro Cys Gly Lys Ile	165	170	175			
Pro Ile Leu Glu Lys Arg Asn Ala Ser Lys Pro Gln Gly Arg Ile Val	180	185	190			
Gly Gly Lys Val Cys Pro Lys Gly Glu Cys Pro Trp Gln Val Leu Leu	195	200	205			
Leu Val Asn Gly Ala Gln Leu Cys Gly Gly Thr Leu Ile Asn Thr Ile	210	215	220			
Trp Val Val Ser Ala Ala His Cys Phe Asp Lys Ile Lys Asn Trp Arg	225	230	235	240		
Asn Leu Ile Ala Val Leu Gly Glu His Asp Leu Ser Glu His Asp Gly	245	250	255			
Asp Glu Gln Ser Arg Arg Val Ala Gln Val Ile Ile Pro Ser Thr Tyr	260	265	270			
Val Pro Gly Thr Thr Asn His Asp Ile Ala Leu Leu Arg Leu His Gln	275	280	285			
Pro Val Val Leu Thr Asp His Val Val Pro Leu Cys Leu Pro Glu Arg	290	295	300			
Thr Phe Ser Glu Arg Thr Leu Ala Phe Val Arg Phe Ser Leu Val Ser	305	310	315	320		
Gly Trp Gly Gln Leu Leu Asp Arg Gly Ala Thr Ala Leu Glu Leu Met	325	330	335			
Val Leu Asn Val Pro Arg Leu Met Thr Gln Asp Cys Leu Gln Gln Ser	340	345	350			
Arg Lys Val Gly Asp Ser Pro Asn Ile Thr Glu Tyr Met Phe Cys Ala	355	360	365			
Gly Tyr Ser Asp Gly Ser Lys Asp Ser Cys Lys Gly Asp Ser Gly Gly	370	375	380			
Pro His Ala Thr His Tyr Arg Gly Thr Trp Tyr Leu Thr Gly Ile Val	385	390	395	400		

Ser Trp Gly Gln Gly Cys Ala Thr Val Gly His Phe Gly Val Tyr Thr
 405 410 415

Arg Val Ser Gln Tyr Ile Glu Trp Leu Gln Lys Leu Met Arg Ser Glu
 420 425 430

Pro Arg Pro Gly Val Leu Leu Arg Ala Pro Phe Pro
 435 440

<210> 3015
 <211> 769
 <212> PRT
 <213> Homo sapiens

<400> 3015

Met Leu Gly Leu Arg Pro Pro Leu Leu Ala Leu Val Gly Leu Leu Ser
 1 5 10 15

Leu Gly Cys Val Leu Ser Gln Glu Cys Thr Lys Phe Lys Val Ser Ser
 20 25 30

Cys Arg Glu Cys Ile Glu Ser Gly Pro Gly Cys Thr Trp Cys Gln Lys
 35 40 45

Leu Asn Phe Thr Gly Pro Gly Asp Pro Asp Ser Ile Arg Cys Asp Thr
 50 55 60

Arg Pro Gln Leu Leu Met Arg Gly Cys Ala Ala Asp Asp Ile Met Asp
 65 70 75 80

Pro Thr Ser Leu Ala Glu Thr Gln Glu Asp His Asn Gly Gly Gln Lys
 85 90 95

Gln Leu Ser Pro Gln Lys Val Thr Leu Tyr Leu Arg Pro Gly Gln Ala
 100 105 110

Ala Ala Phe Asn Val Thr Phe Arg Arg Ala Lys Gly Tyr Pro Ile Asp
 115 120 125

Leu Tyr Tyr Leu Met Asp Leu Ser Tyr Ser Met Leu Asp Asp Leu Arg
 130 135 140

Asn Val Lys Lys Leu Gly Gly Asp Leu Leu Arg Ala Leu Asn Glu Ile
 145 150 155 160

Thr Glu Ser Gly Arg Ile Gly Phe Gly Ser Phe Val Asp Lys Thr Val
 165 170 175

Leu Pro Phe Val Asn Thr His Pro Asp Lys Leu Arg Asn Pro Cys Pro
 180 185 190

Asn Lys Glu Lys Glu Cys Gln Pro Pro Phe Ala Phe Arg His Val Leu
 195 200 205

Lys Leu Thr Asn Asn Ser Asn Gln Phe Gln Thr Glu Val Gly Lys Gln
 210 215 220

Leu Ile Ser Gly Asn Leu Asp Ala Pro Glu Gly Gly Leu Asp Ala Met
 225 230 235 240

Met Gln Val Ala Ala Cys Pro Glu Glu Ile Gly Trp Arg Asn Val Thr
 245 250 255

Arg Leu Leu Val Phe Ala Thr Asp Asp Gly Phe His Phe Ala Gly Asp
 260 265 270

Gly Lys Leu Gly Ala Ile Leu Thr Pro Asn Asp Gly Arg Cys His Leu
 275 280 285

Glu Asp Asn Leu Tyr Lys Arg Ser Asn Glu Phe Asp Tyr Pro Ser Val
 290 295 300

Gly Gln Leu Ala His Lys Leu Ala Glu Asn Asn Ile Gln Pro Ile Phe
 305 310 315 320

Ala Val Thr Ser Arg Met Val Lys Thr Tyr Glu Lys Leu Thr Glu Ile
 325 330 335

Ile Pro Lys Ser Ala Val Gly Glu Leu Ser Glu Asp Ser Ser Asn Val
 340 345 350

Val His Leu Ile Lys Asn Ala Tyr Asn Lys Leu Ser Ser Arg Val Phe
 355 360 365

Leu Asp His Asn Ala Leu Pro Asp Thr Leu Lys Val Thr Tyr Asp Ser
 370 375 380

Phe Cys Ser Asn Gly Val Thr His Arg Asn Gln Pro Arg Gly Asp Cys
 385 390 395 400

Asp Gly Val Gln Ile Asn Val Pro Ile Thr Phe Gln Val Lys Val Thr

405	410	415
Ala Thr Glu Cys Ile Gln Glu Gln Ser Phe Val Ile Arg Ala Leu Gly 420 425 430		
Phe Thr Asp Ile Val Thr Val Gln Val Leu Pro Gln Cys Glu Cys Arg 435 440 445		
Cys Arg Asp Gln Ser Arg Asp Arg Ser Leu Cys His Gly Lys Gly Phe 450 455 460		
Leu Glu Cys Gly Ile Cys Arg Cys Asp Thr Gly Tyr Ile Gly Lys Asn 465 470 475 480		
Cys Glu Cys Gln Thr Gln Gly Arg Ser Ser Gln Glu Leu Glu Gly Ser 485 490 495		
Cys Arg Lys Asp Asn Asn Ser Ile Ile Cys Ser Gly Leu Gly Asp Cys 500 505 510		
Val Cys Gly Gln Cys Leu Cys His Thr Ser Asp Val Pro Gly Lys Leu 515 520 525		
Ile Tyr Gly Gln Tyr Cys Glu Cys Asp Thr Ile Asn Cys Glu Arg Tyr 530 535 540		
Asn Gly Gln Val Cys Gly Gly Pro Gly Arg Gly Leu Cys Phe Cys Gly 545 550 555 560		
Lys Cys Arg Cys His Pro Gly Phe Glu Gly Ser Ala Cys Gln Cys Glu 565 570 575		
Arg Thr Thr Glu Gly Cys Leu Asn Pro Arg Arg Val Glu Cys Ser Gly 580 585 590		
Arg Gly Arg Cys Arg Cys Asn Val Cys Glu Cys His Ser Gly Tyr Gln 595 600 605		
Leu Pro Leu Cys Gln Glu Cys Pro Gly Cys Pro Ser Pro Cys Gly Lys 610 615 620		
Tyr Ile Ser Cys Ala Glu Cys Leu Lys Phe Glu Lys Gly Pro Phe Gly 625 630 635 640		
Lys Asn Cys Ser Ala Ala Cys Pro Gly Leu Gln Leu Ser Asn Asn Pro 645 650 655		

Val Lys Gly Arg Thr Cys Lys Glu Arg Asp Ser Glu Gly Cys Trp Val
 660 665 670

Ala Tyr Thr Leu Glu Gln Gln Asp Gly Met Asp Arg Tyr Leu Ile Tyr
 675 680 685

Val Asp Glu Ser Arg Glu Cys Val Ala Gly Pro Asn Ile Ala Ala Ile
 690 695 700

Val Gly Gly Thr Val Ala Gly Ile Val Leu Ile Gly Ile Leu Leu Leu
 705 710 715 720

Val Ile Trp Lys Ala Leu Ile His Leu Ser Asp Leu Arg Glu Tyr Arg
 725 730 735

Arg Phe Glu Lys Glu Lys Leu Lys Ser Gln Trp Asn Asn Asp Asn Pro
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Leu Phe Lys Ser Ala Thr Thr Thr Val Met Asn Pro Lys Phe Ala Glu
 755 760 765

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<210> 3017
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 <212> DNA
 <213> Homo sapiens

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<210> 3018
 <211> 50
 <212> DNA
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<210> 3019
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<212> DNA
<213> Homo sapiens

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<210> 3020
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<210> 3021
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<212> DNA
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<210> 3022
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<210> 3023
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<210> 3024
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<212> DNA
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<210> 3025
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<212> DNA
<213> Homo sapiens

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<210> 3026
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<210> 3027
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<210> 3028
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<210> 3030
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<210> 3031
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<210> 3032
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<400> 3032
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<210> 3035
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<400> 3035
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<210> 3036
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<400> 3036
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<210> 3037
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<210> 3039
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<210> 3043
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<210> 3044
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<210> 3045
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<212> DNA
<213> Homo sapiens

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<210> 3046

<211> 50
<212> DNA
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<400> 3046
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<210> 3047
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<210> 3048
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<210> 3049
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<212> DNA
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<210> 3050
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<213> Homo sapiens

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<210> 3051
<211> 50
<212> DNA
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<400> 3051
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<210> 3052
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<210> 3053
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<210> 3054
<211> 50
<212> DNA
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<400> 3054
gggcattcca ccgaaattct tggggaaatt tagtagcctt catttttagca 50

<210> 3055
<211> 50
<212> DNA
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<400> 3055
aaagggtttt atccactgtc atttcaattg gataacattt tgtcaagttt 50

<210> 3056
<211> 50
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<210> 3057
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<212> DNA
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<210> 3058
<211> 50
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<210> 3059
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<212> DNA
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<400> 3059

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<210> 3060
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<210> 3061
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<210> 3062
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<212> DNA
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<210> 3066
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<210> 3069
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<213> Homo sapiens

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ggaaatgttg ctgtggggga ttcattgtaa ctctccttgt gaactgctca 50

<210> 3070
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<210> 3071
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<400> 3071
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<210> 3072
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<210> 3077
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<210> 3080
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<210> 3081
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<400> 3081
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<210> 3082
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 <212> DNA
 <213> Homo sapiens

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 ttt 63

<210> 3083
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 <212> DNA
 <213> Homo sapiens

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 gcatcccca aagttcacia tgtggccgag gactttgatt gcacattggt gttttttaat 120
 agtcattcca aatatgagat gcattgttac aggaagtccc ttgccatcct aaaagcacc 180
 cacttctctc taaggagaat ggcccagtc tctcccaagt ccacacaggg gagggatagc 240
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 attttgtttt attttgaatg atgagccttc gtgccccccc ttcccccttt tttcccccaa 360
 cttgagatgt atgaaggctt ttggtctccc tgggagtggtg tggaggcagc cgggcttacc 420
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acgagagtgc tggggaataa aaaggggatc ttcactcggc agagacaacc aaaaagtgca 180
 gcgttccttt tgcgagagag atactggaag attgccaatg aaaccaggta tccccactca 240
 gtagccaagt cacaatgttt ggaaaacagc ccgtttactt gagcaagact gataccacct 300
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<210> 3087
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aagaaaacca tgaaacgcta ctaactacag gaagcaaact aagccccgc tgtaatgaaa 180
caccttctct ggagccaagt ccagatttac actgggagag gtgccagcaa ctgaataaat 240
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ctgaataaat acctcttagc tgagtgg 327

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<400> 3097
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<400> 3098
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<210> 3100
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<400> 3100
gggggcttag tttgcttctt 20

<210> 3101
<211> 5252
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tcacgcctt ccaggactga ctgcattgca cagatgatgg atatttacgt atgtttgaaa 180
cgaccatcct ggatggtgga caataaaaga atgaggactg cttcaaattt ccagtggctg 240

ttatcaacat ttattcttct atatctaataa aatcaagtaa atagccagaa aaagggggct	300
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gttatctggg aaattaaagt tctacgtaaa gagagtatgg agctcgtaaa attagtgacc	720
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<212> DNA
<213> Homo sapiens

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<220>
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<223> n is a, c, g, t or u

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<213> Homo sapiens

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 <213> Homo sapiens

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 <212> DNA
 <213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<222> (543)..(543)
<223> n is a, c, g, t or u

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gatcatttaa ctttagcact ataagcaagc attaaattaa atgcactcag atttttggca      180

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cattatatgg cattccttat accacatatt tataagatct aaaggattat aaacatatta	240
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gtgctcttgg tgagggtgaa cagaaaagaa aaggcttctt ctttagccct taagcctatg	360
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<210> 3113
 <211> 1026
 <212> DNA
 <213> Homo sapiens

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agcccagata gctcttcagc ctgcactgaa gttcaatggg ggtggtcata tcaatcatag	300
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<212> DNA
<213> Homo sapiens

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 <212> DNA
 <213> Homo sapiens

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ccaaaagtca taaaagcaa aagctatctt tttttcactc tggcaccat ctgttcttcc	180
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<210> 3116
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 <212> DNA
 <213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<220>

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<222> (521)..(521)

<223> n is a, c, g, t or u

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